

ENVIRONMENTAL ASSESSMENT REPORT

PROPOSED NEW COMMERCIAL/INDUSTRIAL DEVELOPMENT AT PLOT A FOR ELLGIA LTD

GDP PROJECT NUMBER 1936-A

28 AUGUST 2019



Brownfield Consulting & Development



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1.0 INTRODUCTION

1.1 Authorisation and Context

GD Pickles Limited (GDP) was instructed by Ellgia Ltd (the Client) to carry out an Environmental Assessment for a proposed commercial/industrial development located adjacent to the existing Ellgia Waste management & recycling facility on land known as "Plot A"; part of the former AC Autos facility off Winterton Road, Scunthorpe DN15 0DA (hereafter referred to as "the Site").

Detailed development plans were not available at the time of writing but we understand the development will comprise a typical steel portal frame building, concrete flooring and external areas comprising concrete hardstanding. It is intended to re-profile the Site to provide an engineered level platform; this will result in the western three quarters of the Site being raised by approximately 1.5m and a reduction in level at the east end of the Site. A basic conceptual block plan is provided in Appendix 1.



Figure 1 - Site Location Map and Satellite Image

GDP Report Ref. 1936-A Environmental Assessment Report Proposed Commercial Development PLOT A ELLGIA, SCUNTHORPE



1.2 Purpose of Investigations

This Assessment has been undertaken to fulfil the typical contaminated land 'site characterisation' evaluation requirements in support of the planning application for the Site. The assessment includes a Phase 1 Desk Top Study and Phase 2 Intrusive Investigations, with associated soil and water sampling and monitoring of permanent ground gases. The assessment also considers whether further investigation, risk assessment and/or remediation may be required during the development process.

A geotechnical assessment and engineering considerations did not form part of this commission.



2.0 PRELIMINARY RISK ASSESSMENT

2.1 Objectives of Preliminary Risk Assessment

The objectives of the Preliminary Risk Assessment (PRA) were to:

- Establish the geological and hydrogeological conditions for the Site using existing available information;
- Summarise available information and identify Site specific environmental hazards which may place a constraint upon the proposed development;
- Produce a preliminary Conceptual Site Model (CSM) and preliminary qualitative contamination risk assessment identifying plausible potential linkages between contamination sources, pathways and receptors; and
- Provide objectives and recommendations with regards to an Intrusive Ground Investigation (Phase 2) and other further assessments that may be required.

The assessments in the Report were underpinned by Planning and Regulatory requirements at time of writing.

2.2 Environmental Setting

A Groundsure Enviro Insight has been procured for the Site. Historical maps and Groundsure Geo Insight procured by the Client in 2016 for an adjacent development have been reviewed as part of this Assessment. The Groundsure reports and historical mapping are presented in Appendix 2.

2.2.1 Site Setting and Description

The Site currently forms part of the wider Ellgia facility. The western three quarters of the Site is used for the storage of empty skips, some waste steel is also present on the north east of this area, mainly comprising large steel frames and RSJs. A large 360 grab/excavator is also present in this location.

The western three quarters of the Site is surfaced in concrete which has a rough surface and appears to have been laid in an ad-hoc fashion. No Buildings are located on this part of the Site. This area of the Site slopes gently to the east. An embankment then rises to the eastern end of the Site which is surfaced in more competent-looking concrete. The embankment is mainly vegetated with a surfaced vehicle access on its south. A number of prefabricated buildings are located on the raised platform in the east. On inspection these were mainly disused but understood to historically have been used as offices, general stores, mess room and toilets.

A narrow strip of rough vegetation is present on the north boundary of the Site. This forms an embankment to a track which is present to the north. Beyond this to the north is a further embankment leading to a higher platform on which profile clad buildings and a concrete yard associated with part of the existing Ellgia facility are present. To the east of



the Site is a large pond which is surrounded by dense vegetation. Pondwater appears clear and small fish and invertebrates were observed in and on the water. Beyond the pond to the east is a track followed by a railway line immediately followed by land associated with the western extent of Scunthorpe Steel Works.

To the south is the remainder of the former concreted AC Autos yard now used for skip storage, beyond which is an infilled drainage ditch followed by a slope up onto unsurfaced ground in use by Ellgia as part of the wider waste processing and recycling facility. This land use also wraps around the western end of the Site. A building constructed from steel shipping containers and profile cladding is present adjacent to the south east corner of the Site which is currently in use as a skip repair and painting facility. Other buildings and lean-to structures are also present off-site in this area associated with the former use of the AC Autos site as a vehicle breakers yard.

The topography of the wider area rises to the north, west and south with a slope down to the east to the adjacent pond feature.

The Site is approximately located at national grid reference 490293, 412144. and is approximately 0.5 hectares in area.

2.2.2 Historical Map Review Summary

Historical maps were reviewed to determine the likely development history of the Site and its environs to identify any potentially contaminative land-uses and or other development implications. Small scale maps do not show the Site in any detail. The pertinent observations from the larger scale maps are summarised below.

Date(s)	On-Site	Off-Site	
1886-1887	The Site is undeveloped.	The surrounding area is farmland. A small quarry is shown approximately 200m north west. Winterton Road is shown circa 150m to the west of the Site.	
1907	The Site is mainly undeveloped. A railway line may cross the north east corner.	North Lindsey Light Railway is present to the east of the Site with a branch running parallel to the north of the Site. Additional rail lines are present to the east, north and south. An embankment indicative of earthworks or demarking the area of the former quarry is shown circa 100m north. Small buildings are shown to the north east.	
1964 1963-64	The west of the Site is mainly undeveloped with a track running part way into the west. A drain crosses the south west of the Site. The east is	Various cuttings and embankments are shown in all directions including an embankment to Winterton Road, and along the various railway lines now marked 'mineral	



	shown as deciduous woodland. An embankment is shown on the north and into the north east of the Site rising to the north. A track is shown running NE to SW in the central east of the Site.	railway' to the north, south and east. Ponds are shown to the north, south, south east and north west. Industrial development marked 'works' are shown on the opposite side of Winterton Road circa 200m to the west. A 'refuse tip' is marked circa 200m south east.
1973-76 1987-88 (no value) 1986-91 1990-94	Three buildings are shown on the Site. A drain is shown along part of the north boundary which appears to form a pond at its eastern end. The woodland on the east of the Site is no longer shown.	A pond is present immediately east of the Site which continues south west along the railway line. A 'pond' (large lake) is shown north east of the Site beyond the adjacent track. Land to the north and north west has been developed with buildings and a hopper is shown. Several scattered buildings are shown to the south west. Additional industrial development appears underway on the west side of Winterton Road including construction of a tank (gas) circa 200m from Site.

Pertinent observations from small scale maps include the expansion of the former Trent Iron Works shown on the 1885 edition into British Steel Scunthorpe Steel Works covering a significant area of land to the east, north east and south east. This included the placement of large amounts of waste material to within approximately 100m east of the Site shown on 1977 to 1994 maps. More recently several lakes are shown in this area. Heavy industry is shown beyond this circa 450m south on 1977-80 edition and is labelled tar distillery from 1990-94. Land to the north west of the Site is shown as a Waste Transfer Station (now Ellgia) from the 2002 edition. Ponds to the south of the Site are shown to be partly infilled between 2010 and 2014.

Anecdotal information and Google Earth satellite imagery

It is understood that the Site formed part of AC Autos which operated mainly as a vehicle breakers yard and scrap metal dealer. The facility operated for several decades processing hundreds of vehicles a year until its recent acquisition by Ellgia. Satellite imagery from 2003 appears to show the lower level western area of the Site unsurfaced with various stockpiles of metal wastes. Numerous cars are shown on the east of the Site on what appears to be concrete – as current. Images from 2008 and 2009 shows most of the Site on both levels covered in cars. By 2015 most of the Site is vacant and appears as a patchwork of concrete – as current.

It is understood that the buildings formerly shown on the Site were prefabricated structures in use for dry storage or offices. The land to the south and west of the Site is understood to have been used as a waste processing and transfer station for several decades including breaking and storing vehicles and managing commercial, industrial and household wastes.

The buildings shown to the north of the Site from the 1970's edition is understood to have been a piggery, later redeveloped as part of the waste management facility.



2.2.3 Published Geology

Reference to the Groundsure Geo Insight reports indicates the Site is located on Artificial Ground.

Superficial deposits are not shown on most of the Site. The far east of the Site is mapped as Sutton Sand Formation.

Bedrock is the Frodingham Ironstone Member.

2.2.4 Hydrogeology

The superficial deposits on the eastern boundary are classified as a Secondary A Aquifer. The bedrock across the Site is also classified as a Secondary A aquifer.

There are no groundwater abstractions within 1km of the Site. The Site is not in a Source protection Zone.

Soils are classified as HU - Minor Aquifer/High leaching potential.

2.2.5 Hydrology

According to the Groundsure report the closest water course to the Site is 99m west. This is a drainage ditch located along the eastern side of Winterton Road. It was noted to be dry during the period of this Assessment and is understood to rarely contain water along Winterton Road. The nearest water feature is the pond directly east of the Site.

There are no surface water abstractions within 2km of the Site.

2.2.6 Flood Risk

According to the Groundsure report:

The Site is recorded as having a Very Low Risk of Flooding from Rivers and the Sea (RoFRaS).

Consideration of flood risk falls outside the scope of this Assessment.

2.2.7 Radon Gas

GDP procured a site-specific radon report for the Site. The Site is located in a radon affected area. Basic radon protection measures are required. Further details can be found in BRE 211. The Radon Report is presented in Appendix 3.



2.2.8 Mining

The Site is not located within 75m of a coal mining area, 50m of non-coal mining areas or 75m of Brine Affected Area.

Risks to the Site from resource extraction or geotechnical matters fall outside of the scope of this commission and are not considered further in this Report.

2.2.9 Environmentally Sensitive Sites

The Site is located in a Nitrate Vulnerable Zone. Sawcliffe Local Nature Reserve is present 910m north. No other environmentally sensitive sites/ records are indicated within 1km of the Site.

2.2.10 Natural Hazards

According to the Groundsure report:

- The shrink swell hazard is negligible;
- The landslide hazard is very low;
- The soluble rocks hazard is negligible;
- The compressible ground hazard is moderate;
- The collapsible rocks hazard is very low; and
- The running sands hazard is low.

2.2.11 Groundsure Database entries

Salient points identified from the database review include:

- There are 156 potentially contaminative historical land uses identified from mapping listed within 500m of the Site. Many are repeat entries for the same feature including railway sidings, refuse heaps, cuttings and quarries. The Site is listed as being of historical industrial use due to the presence of railway sidings;
- There are 250 historical tanks listed within 500m. Again, most of these are repeat entries for the same feature. The closest tank listed is 154m north west. This may be the hopper shown on historical mapping associated with the former piggery in this area and likely stored animal feeds. Numerous tanks are listed in a north west direction associated with the BOC gases site;
- The closest historical energy features listed are a electricity substation 191m west and gas depot 352m south;
- There are no records of historical petrol & fuel or garage and vehicle repair sites in the vicinity;



- There are 75 entries for potentially infilled land within 500m, including the Site itself associated with an infilled pond – likely the feature shown on historical maps along the Site's northern boundary;
- There are 6 Part A(2) and Part Part B activities within 500m. The closest is the Ellgia Facility registered 96m north, a vehicle spraying facility 190m west and a historical minerals processing facility 239m west;
- There are 2 Planning Hazardous Substances Consents listed within 500m, these relate to the BOC facility registered 260m north west and Koppers UK relating to storage of products in connection with the tar distillery process405m south;
- There are 5 COMAH and NIHHS Authorisation records within 500m; two relate to the BOC facility listed 132 and 139m north west, British Steel 218m south, Bitmac 252m south and British Gas 252m south;
- There are 13 records of pollution incidents within 500m these include a significant impact to water from dust listed 102m north, significant land impact from commercial waste 163m north. The remainder of records relate to smoke, and odours;
- There are 3 landfills listed in the Groundsure report these being 47m south east operated by Industrial Chemicals Ltd and two records operated by British Steel 153m east and 799m north east;
- There are 10 historic landfill site records within 1500m, the closest being 238m south. Additional landfill records from historical mapping are listed from 126m east;
- There are 8 waste treatment, transfer or disposal sites within 500m. The 5 closest records appear to relate to planning applications associated with Bell Waste (now Ellgia) to the north and north west of the Site;
- There are 63 Environment Agency licensed waste sites within 1500m. The Site itself is listed as is land adjacent to the north and west;
- There are 13 current potentially contaminative land uses listed within 250m, these include the Site itself as a scrap merchant, the adjacent Ellgia facility, a refuse tip, the BOC facility, vehicle repair testing and servicing, tanks, water pumping stations, electrical features and refuse disposal.

2.3 Previous Investigations

The Site has been subject to a limited investigation by Silkstone Environmental in March 2019 as part of a due diligence exercise by Ellgia prior to the acquisition of the wider AC Autos site. On the subject Site the investigation comprised the excavation of 2 shallow trial pits: AC1 and AC5. Soil logs were not produced. Soil samples were collected from each location at 0.5m. Samples were analysed for a suite of contamination including heavy metals, PAH, BTEX, total cyanide, asbestos, TPH, VOC and SVOC.

Laboratory results have been reviewed along with the analytical data from the sampling undertaken by GDP as part of this investigation and are discussed later in this report.



Significant contamination was not identified in the samples analysed from the subject Site or wider AC Autos plot.

The Silkstone investigation location plan and laboratory results are provided in Appendix 4.

2.4 Qualitative Contaminated Land Assessment

2.4.1 Initial Conceptual Site Model

An initial Conceptual Site Model (CSM) has been developed for the Site adopting the Source-Pathway-Receptor approach. The initial CSM was developed during the preliminary risk assessment stage and used to design the Phase 2 Intrusive Investigations.

- Sources (S) are potential or known contaminant sources e.g. soil contamination resulting from a former land use;
- Pathways (P) are environmental systems thorough which a contaminant could migrate e.g. air, groundwater;
- Receptors (R) are sensitive environmental receptors that could be adversely affected by a contaminant. e.g. Human End User (longer- term risks) or groundworkers (shorter-term risks), surface or groundwater resources and ecology.

Where a source, relevant pathway and receptor are present, a plausible pollutant linkage is considered to exist whereby environmental harm could occur and a potential environmental liability could be realised.

The site specific potential pollutant linkages have been assessed and used to formulate the initial Conceptual Model for the Site presented in Table 2.4.1.

POTENTI	POTENTIAL SOURCES						
CSM ID	Detailed Description	Summary Description for CSM					
S1	Potentially contaminated soils associated with current and historical site uses.	S1: Soil Contamination.					
S2	Contaminated groundwater resulting from soil contamination.	S2: Groundwater Contamination.					
S3	Potential for contamination originating from off-site sources.	S3: Off-site sourced contamination.					
S4	Asbestos containing materials within made ground possibly buried.	S4: ACMs					

Table 2.4.1 Initial Conceptual Model



	POTENTIAL PATHWAYS						
CSM ID	Detailed Description	Summary description for CSM					
P1	 Human uptake pathways; Ingestion of excavated or exposed soils; Ingestion of home grown produce; Inhalation of soil/dust/volatile compounds or hazardous ground gases via migration through permeable strata/conduits; and Dermal contact with exposed soils or leachates. 	P1: Human uptake					
P2	Vertical migration of contaminants through the unsaturated zone	P2: Vertical Migration Unsaturated Zone					
Р3	Horizontal and vertical migration of contaminants within groundwater	P3: Groundwater Migration					
P4	Direct contact of soils with construction materials	P4: Direct Contact Construction Materials					
Р5	Migration of permanent ground gases in soils and into buildings.	P5: Ground gas Migration					
POTENTIAL RECEPTORS							
CSM ID	Detailed Description	Summary description for CSM					
R1	Construction/maintenance workers.	R1: Construction workers					
R2	Controlled waters within the Secondary Aquifer and nearby surface waters.	R2: Controlled waters					
R3	End-users.	R3: End-users					
R4	Construction Materials - Buried concrete and potable water supply pipes.	R4: Construction Materials					
R5	Off-site property and users.	R5: Off-site receptors					

2.4.2 Risk Evaluation

For each potential pollutant linkage identified within the Conceptual Model the potential risk has been evaluated for potential receptors using a Preliminary Qualitative Risk Assessment based on the probability of the pollution event and the severity it poses to Site users and the environment. The Methodology is presented in Appendix 5.

The preliminary assessment of risk assumes no specific remediation measures but does take account of obvious pathway disruption due to development such as hard standing, building footprints or necessary excavations.



The risk evaluation assessment is summarised in Table 2.4.2 below. The CSM and Qualitative Risk Assessment is refreshed following review of the ground investigation findings including any geochemical analyses.



Detential Course	Detential Dathursu	Detential December	Companyance	Duchahilitu	Diale	Commente
Potential Source	Potential Pathway	Potential Receptor	Consequence	Probability	RISK	Comments
S1 Soil	P1: Human Uptake	R1: Construction workers	Medium	Likely	Moderate	The former use of the Site as a vehicle
Contamination		R3: End-users	Medium	Low	Moderate/	breakers yard is likely to have caused
				likelihood	Low	contamination of soils. Most likely
	P2: Vertical migration	R3: End-users	Mild	Low	Low	include bydrocerbons BTEX other VOC
	unsaturated zone			likelihood		metals PAH and ashestos from brake and
						clutch components. The Site is shown on
						mapping as being located on artificial ground
						which could also contain contamination,
						although only limited fill is present on the
						majority of the Site which is at lower levels.
	P3: Groundwater	R2: Controlled waters	Medium	Low	Moderate/	Shallow groundwater is anticipated with the
	migration			likelihood	Low	pond adjacent to the east of the Site
		R3: End-users	Minor	Unlikely	Very low	historic land use localised impact of
		R4: Construction Mild	Likely Low	Low	groundwater from soil contamination is	
		materials				possible. However the adjacent pond is likely
						down hydraulic gradient and appears clear
						and supports wildlife suggesting significant
						impact of groundwater has not occurred.
	P4: Direct contact	R4: Construction	Medium	Likely	Moderate	Hydrocarbon contamination is likely. If
	construction materials	materials				potable water supplies are proposed for the
						new building hydrocarbon resistant pipes are
						Challen and a start a set is in the start and and
S2: Groundwater	P1: Human Optake	R1: Construction workers	Medium	Likely	Moderate	Shallow groundwater is anticipated and may
Contamination		R3: End-users	Mild	Unlikely	Very low	
	P3: Groundwater	R2: Controlled waters	Medium	Likely	Moderate	
	migration					
	P4: Direct contact	R4: Construction	Medium	Likely	Moderate	

Table 2.4.2 Preliminary Qualitative Risk Assessment



	construction materials	materials				
S3: Off-site sourced contamination	P1: Human Uptake	R1: Construction workers	Medium	Low likelihood	Moderate/ Low	The Site is surrounded by land to the north west and south which has been in use as a
		R3: End-users	Medium	Low likelihood	Moderate/ Low	waste transfer and recycling facility, including breakers yards, for several decades. Land to the east includes railway sidings and a large
	P3: Groundwater migration	R2: Controlled waters	Medium	Likely	Moderate	expanse of steelworks waste infill. Mobile (free phase) contamination is possible but not anticipated on a large scale, however leachable contamination may be present with the potential to impact controlled waters.
	P4: Direct contact	R4: Construction	Medium	Low	Moderate/	
	construction materials	materials		likelihood	Low	
S4: ACMs	P1: Human Uptake	R1: Construction workers	Severe	Likely	High	Asbestos was historically commonly used in
		R3: End-users	Severe	Unlikely	Moderate/ Low	vehicle clutch and brake linings. Asbestos may also have been used in buildings historically present on Site and could be present in fill material. Pathways will not exist following development as the Site will be covered in hardstanding and buildings. Construction Phase risk assessments and appropriate precautions to comply with CAR 2012 will be required.
S5 : Ground Gas	P5: Ground gas migration	R3: End Users	Medium	Likely	Moderate	Made ground is anticipated beneath the Site, however the existing ground including the elevated platform in the east will be removed during the development and the Site levelled and raised to a consistent height with engineered fill with low potential for ground gas genesis. Degradation of hydrocarbons, if present, can result in ground gases and



		volatile vapours, although rates of generation would be anticipated to be low. Volatile
		vapours may also be present if soils are
		contaminated with hydrocarbons or VOCs.
		Several landfills and areas of infilled ground
		have been identified from the desk study,
		although the Site is at a low level and ground
		gases are likely to escape to air via the sloping
		ground and numerous embankments
		surrounding the Site prior to migrating onto
		the Site itself. The Site is located in a radon
		affected area and basic protection measures
		are required for new buildings.



3.0 SCOPE OF INTRUSIVE GROUND INVESTIGATIONS

3.1 Fieldwork

GDP's scope of works included:

- 6No. dynamic sample boreholes;
- Installation of 3 monitoring wells;
- PID screening of soil cores;
- Collection of representative soils for analysis;
- Collection of groundwater samples from 3 boreholes;
- Collection of surface water from the adjacent pond; and
- Monitoring of monitoring wells for permanent ground gases on 4No. occasions.

Ground investigations were undertaken on 19th June 2019

Investigation locations are shown on Figure 2.



Figure 2 – Borehole & Trial Pit Location Plan – Proposed Layout

Not to scale. Locations are approximate.

In the absence of specific point sources of contamination borehole locations were sited to obtain good coverage of the Site.



The Exploratory Hole records are presented at Appendix 6.

3.2 Laboratory and Field Testing

3.2.1 Soil

Soil samples were collected from borehole arisings. All samples were selected on the basis of PID readings and field observations including the presence of discolouration of the soil, changes in soil horizon, presence/composition of made ground.

Soil samples from the boreholes were screened in the field at approximately 0.3m intervals using a PID fitted with a 10.6eV UV lamp. The PID provides a semi-quantitative assessment of potential contaminant impact, giving an indication of the presence of volatile organic compounds (VOC) in the soil. The numerical output cannot be directly compared to measured soil concentrations of contaminants of concern but instead is used to provide a VOC profile to aid interpretation and enable samples to be selected for subsequent laboratory analysis.

All samples selected were packed into appropriate sample containers specified and supplied by the analytical laboratory. The samples were dispatched in a cool box in a chilled condition to DETS Environmental for the following analysis:

- Basic suite: As, Ba, Be, WSB, Cd, Cr, Cr VI, Cu, Pb, Hg, Ni, Se, V, Zn;
- 🍄 pH;
- Speciated PAH;
- Organic Matter;
- Speciated TPH;
- BTEX & MTBE;
- 🔅 VOC;
- PCB; and
- Sector Screen and quantification.

3.2.2 Waters

Groundwater samples were collected from BHB and BHD. A sample of surface water was also collected from the adjacent pond (Pond 1). The samples were dispatched in a cool box in a chilled condition to DETS Environmental for the following analysis:

- Basic suite: As, Ba, Be, B, Cd, Cr, Cr VI, Cu, Pb, Hg, Ni, Se, V, Zn;
- 🍄 рН;
- 🍄 hardness
- Speciated PAH;
- Speciated TPH;
- 💝 BTEX & MTBE;
- 🍄 VOC.



Groundwater was sampled using new disposable bailer for each well to prevent cross contamination. Samples were then collected from the bailers into new glass bottles and vials supplied by the laboratory. It was not possible to properly develop BHB prior to sampling as groundwater recharge was very slow. A 'grab' sample was therefore collected after the removal of only 2 to 3 litres of water and laboratory results should be deemed indicative of conditions and likely represent 'worst case' concentrations. BHD was bailed of approximately 3 well volumes prior to sampling and recharged more quickly.

Laboratory testing certificates are presented at Appendix 7.

3.3 Monitoring Wells

Groundwater level and ground gas monitoring wells were installed in BHB, BHD and BHE. Boreholes were advanced to refusal in bedrock with subsequent monitoring wells installed to between 1.2m and 2.5m deep. The upper 0.3m to 0.5m of each monitoring well was constructed with solid pipe surrounded by bentonite and the remaining lower sections with slotted pipe and gravel pack surround. Monitoring wells were completed with a bung and gas taps to facilitate monitoring for permanent ground gases.



4.0 OBSERVED GROUND CONDITIONS

4.1 Ground Model

The exploratory holes were logged by an Environmental Scientist from GDP.

For full descriptions of the strata encountered please refer to the exploratory hole logs presented at Appendix 6.

BH's A, B, D and E are located on the lower level of the Site and BHC and F are located on the raised platform.

The boreholes in the lower level all encountered made ground comprising brown grey and black sandy gravel of mixed lithology with gravels of crushed brick, mortar, glass, concrete, occasional wood, plastic, rubber hose and metal. Made ground was broadly found to be deeper the further to the east. Made ground in BHC and F on the upper platform was brown soily clayey sand and gravel of mixed lithology, brick, clinker and rare tarmac. BHF refused within made ground. BHC proved made ground to 4.1m

Boreholes encountered between 0.6 and 1m of sand beneath made ground prior to refusal on assumed bedrock.

4.2 Observations of Contamination

In situ and observations of arisings obtained during excavations were examined for visual and olfactory indications of contamination. A hydrocarbon odour was observed in BHA at 1.1-1.3m and BHD at 1.8-2.1m.

PID readings above background fluctuations were observed in BHB at between 0.7 and 0.9m with a maximum of 10.4ppm, BHD at 1.6 to 1.9m with a maximum of 10.2ppm, BHE at 2m at 7.5ppm and BHF from 0.9 to 1.6m with a maximum of 10.4ppm. PID screening was not undertaken in BHA due to heavy rain.

4.3 Groundwater Conditions

Soil was observed to be wet in BHC (on the upper platform) from 4m and BHE (lower platform) from 1.8m. Groundwater strikes were not observed in any of the boreholes during drilling.



5.0 ASSESSMENT OF CONTAMINATION

5.1 Generic Assessment Criteria

In the absence of a complete published set of screening values derived by the Regulators using the new CLEA Framework, the assessment refers to the following in priority of use order:

- The LQM/CIEH S4ULs for Human Health Risk Assessment. 'Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3322. All rights reserved.';
- The Soil Guidance Values (SGVs) published by the EA;
- Former SGVs for which no updated SGV has been published;
- The 2009 Chartered Institute of Environmental Health (CIEH)/Land Quality Management (LQM) Generic Assessment Criteria (GAC);
- The guidance values produced by the Environmental Industries Commission (EIC), the Association of Geotechnical and Geoenvironmental Specialists (AGS) and Contaminated Land: Application in Real Environments (CL:AIRE) in December 2009; and
- In house Generic Screening Values (HH-GSVs) derived by the Consultant and other non UK values where considered relevant.
- Consideration has been given to Category 4 Screening Levels as it is likely given recent government support that these will be considered by Local Planning Authorities during assessment of contaminated land. The S4ULs currently exclude Lead, therefore the Defra approved Category 4 Screening Levels (C4SLs) have been adopted.

For the purpose of this assessment, the analytical results have been assessed against guidance values for a '*Commercial*' land use.

Where sufficient sampling has occurred and in cases where contaminants are present in one or more samples in a specific averaging area, above their respective Tier 1 GAC, the results may be subject to statistical assessment in accordance with current best practice to establish if the true mean (upper 95th percentile) is above the screening criteria. If so, then further consideration is given to the risk presented by the contaminant of concern. This may include further detailed quantitative risk assessment and/or further sampling and testing. For example, conservative site default parameters in the CLEA model can be adjusted or replaced with Site specific values.

Limited contamination was encountered so no leachate analysis has been undertaken at this time.



5.2 Soil Analytical Results

All analytes where there is at least one result exceeding the limit of detection are presented in Table 5.2. Samples collected during the previous investigation by Silkstone on the Site (samples AC1 and AC5) are also included in the screening table. The laboratory analytical results are presented at Appendix 7.

Seven soil samples were analysed for Soil Organic Matter (SOM). SOM ranges from 1.1% to 4.2%. Analytical results will be first considered against a SOM of 1% in the first instance where applicable to assessment for organics.

Contaminant	Units	Мах	GAC 1% SOM	No. of exceedances
Arsenic (total)	mg/kg As	34	640*	0
Barium (total)	mg/kg Ba	334	22000#	0
Beryllium (total)	mg/kg Be	4.1	12*	0
Boron (water soluble)	mg/kg B	9.3	240000*	0
Cadmium (total)	mg/kg Cd	2.3	190*	0
Chromium (total)	mg/kg Cr	310	8600*	0
Chromium (VI)	mg/kg Cr	<2	33*	0
Cyanide (total)	mg/kg Cn	<1.0	34	0
Copper (total)	mg/kg Cu	1410	68000*	0
Lead (total)	mg/kg Pb	807	2330 ⁺	0
Mercury (total)	mg/kg Hg	<2.5	58* ^b	0
Nickel (total)	mg/kg Ni	111	980*	0
Selenium (total)	mg/kg Se	<8.0	12000*	0
Vanadium (total)	mg/kg V	111	9000*	0
Zinc (total)	mg/kg Zn	1770	730000*	0
Naphthalene	mg/kg	1.92	190(76.4)*	0
Acenaphthylene	mg/kg	0.53	83000(86.1)*	0
Acenaphthene	mg/kg	14.3	520000*	0
Fluorene	mg/kg	17.5	63000(30.9)*	0
Phenanthrene	mg/kg	120.0	22000*	0
Anthracene	mg/kg	34.1	52000*	0
Fluoranthene	mg/kg	115.0	23000*	0
Pyrene	mg/kg	93.1	54000*	0
Benzo(a)anthracene	mg/kg	42.9	170*	0
Chrysene	mg/kg	52.0	350*	0
Benzo(b)fluoranthene	mg/kg	46.9	44 [*] 1 BHD 0.1-0.3m	
Benzo(k)fluoranthene	mg/kg	17.1	1200 [*]	0
Benzo(a)pyrene	mg/kg	32.9	35*	0
Indeno(123cd)pyrene	mg/kg	13.6	500*	0
Dibenz(ah)anthracene	mg/kg	4.19	3.5*	1 BHD 0.1-0.3m
Benzo(ghi)perylene	mg/kg	12.6	3900*	0

Table 5.2 - Comparison of soil samples to relevant GAC for Commercial land use.



TPH Aromatic EC5-EC7	mg/kg	<0.03	26000(1220)*	0
TPH Aromatic EC7-EC8	mg/kg	0.03	56000(869)*	0
TPH Aromatic EC8-EC10	mg/kg	5	3500(613)*	0
TPH Aromatic EC10-EC12	mg/kg	15	16000(364)*	0
TPH Aromatic EC12-EC16	mg/kg	23	36000(169)*	0
TPH Aromatic EC16-EC21	mg/kg	77	28000*	0
TPH Aromatic EC21-EC35	mg/kg	435	28000*	0
TPH Aliphatic EC5-EC6	mg/kg	0.11	3200(304)*	0
TPH Aliphatic EC6-EC8	mg/kg	0.03	7800(144)*	0
TPH Aliphatic EC8-EC10	mg/kg	11.0	2000(78)*	0
TPH Aliphatic EC10-EC12	mg/kg	<10	9700(48)*	0
TPH Aliphatic EC12-EC16	mg/kg	18	59000(24)*	0
TPH Aliphatic EC16-EC34	mg/kg	759	1600000*	0
TPH Aliphatic EC35-EC44	mg/kg	94	1600000*	0
MTBE	mg/kg	< 0.005	7900#	0
Benzene	mg/kg	0.005	27*	0
Toluene	mg/kg	0.034	56000(869)*	0
Ethylbenzene	mg/kg	0.083	5700(518)*	0
m & p-Xylene	mg/kg	0.263	5900(576)*°	0
o-Xylene	mg/kg	0.171	6600(478)* ^c	0
Asbestos Screen Soil	Detect	Detected	<0.001% ^d	3 BHB 0.7-1.0 0.003% amosite & crocidolite BHD 0.1-0.3 0.009% chrysotile BHE 0.3-0.5 0.001% chrysotile
PCB (12 congeners)	mg/kg	<0.1	-	0
VOC - dichloromethane	mg/kg	0.09	NA	0
рН		6.5-12.1	NA	

* LQM/CIEH GAC for Commercial land use scenario based on a sandy loam soil

EIC/AGS/CL:AIRE GAC for Commercial land use based on a sandy loam soil and 1% SOM

+ C4SL for Commercial land use based on a sandy loam soil

a) Based on GAC for hexavalent chromium.

- b) Based on the lowest GAC for methyl mercury, elemental mercury and inorganic mercury. In this case the lowest GAC is for elemental mercury and is 58 mg/kg but this exceeds the vapour saturation, so the vapour saturation has been used in its place to protect against dermal effects. The S4UL for Commercial is 1100mg/kg.
- c) All xylene isomers should be compared to the lowest of the three GACs, which, in this case is p xylene.
- d) There currently is no published screening criteria for asbestos, however the limit of detection (0.001%) will be used as a preliminary screen. At or below this concentration is considered to be a 'Trace' by GDP.

5.3 Asbestos in Soil

Fragments of ACM were not observed in borehole arisings however low concentrations of asbestos fibres were detected in 3 of 8 samples analysed (including Silkstone samples). Asbestos detected included chrysotile in BHD and BHE and crocidolite and amosite in BHB on



the higher platform area. Given the consistency of the made ground it must be assumed that asbestos fibres may be present in all made ground at the Site.

5.4 pH

Silkstone sampling previously reported high pH in all their samples from the wider AC Autos area and reported pH of 12.1 and 11.5 in AC1 and AC5 respectively which indicate unusually alkaline conditions for soil. For context cement is reported to have a pH of around 11 to 13 depending on reference sources. GDP tested 7 samples for pH and found the pH to range from 6.5 to 10.4, with the majority of results around 8.

The reason for the discrepancy between the two sets of results is unknown, however the GDP dataset is considered representative of conditions and no field observations which would give rise to elevated pH were observed. The Silkstone investigation included breaking the concrete surface (GDP cored locations) and it is possible that some cross contamination from crushed/powered concrete was mixed with the Silkstone samples.

5.5 Waters Analytical Results

The freshwater Environmental Quality Standards (EQS) and The Water Supply (Water Quality) Regulations 2018 (TWSR), where available, have been used as an initial screen to consider the groundwater and pondwater quality at the Site. Laboratory results are presented in Appendix 7.

Contaminant	Units	Max Groundwater	Max 'Pond 1'	Freshwater EQS or best equivalent	TWSR
Arsenic	μg/l As	8	<5	50	10
Barium	μg/l Ba	165	33	NA	NA
Beryllium	µg/I Be	<3	<3	NA	NA
Boron	μg/l B	1700	1320	NA	1000
Cadmium	μg/l Cd	<0.4	<0.4	≤0.08, 0.08, 0.09, 0.15, 0.25	5
Chromium	μg/l Cr	<5	<5	3.4 (CrVI)	50
Copper	μg/l Cu	<5	<5	1 bioavailable	2000
Lead	µg/l Pb	<5	<5	1.2 bioavailable	10
Mercury	μg/l Hg	0.44	<0.05	0.07	1
Nickel	μg/l Ni	15	<5	4 bioavailable	20
Selenium	µg/l Se	<5	<5	NA	10
Vanadium	μg/I V	39	<5	20	NA
Zinc	μg/l Zn	41	9	10.9	NA

Table 5.5 - Comparison of water results to available EQS and TWSR.



				bioavailable	
Napthalene	μg/l	0.29	0.05	2	NA
Acenapthylene	μg/l	<0.01	<0.01	5.8 ^{\$}	NA
Acenaphthene	μg/l	0.34	0.04	NA	NA
Fluorene	μg/l	0.20	<0.01	NA	NA
Phenanthrene	μg/l	0.26	0.02	NA	NA
Anthracene	μg/l	0.05	<0.01	0.1	NA
Fluoranthene	μg/l	0.15	<0.01	0.0063	NA
Pyrene	μg/l	0.12	<0.01	NA	NA
Benzo(a)anthracene	μg/l	<0.01	<0.01	NA	NA
Chrysene	μg/l	<0.01	<0.01	NA	NA
Benzo(b)fluoranthene	μg/l	<0.01	<0.01	NA	0.1
Benzo(k)fluoranthene	μg/l	<0.01	<0.01	NA	0.1
Benzo(a)pyrene	μg/l	<0.01	<0.01	0.00017	0.01
Indeno(123cd)pyrene	μg/l	<0.01	<0.01	NA	0.1
Dibenz(ah)anthracene	μg/l	<0.01	<0.01	NA	NA
Benzo(ghi)perylene	μg/l	<0.008	<0.008	NA	0.1
Total petroleum	μg/l	439	<140	10*	NA
hydrocarbons					
Benzene	μg/l	2	<1	10	1
Toluene	μg/l	<5	<5	74	NA
Ethylbenzene	μg/l	47	<5	NA	NA
P & m-xylene	μg/l	248	<10	NA	NA
o-xylene	μg/l	90	<5	NA	NA
MTBE	μg/l	<10	<10	NA	NA
рН	-	9.9	7.7	6-9	6.5-9.5

* Environment Agency (2009) 'Petroleum hydrocarbons in groundwater: supplementary Guidance for hydrogeological risk assessment'.

^{\$} WRc plc (2002), R&D Technical Report 45.

The evaluation of groundwater and surface water quality at this Site must be undertaken in the context of the widespread heavily industrialised nature of the surrounding land uses.

Groundwater at the Site was not found to be significantly contaminated. No free phase oils, oily luminescence or odours were noted during monitoring or sampling.

Results for the majority of determinands analysed were below method detection limits. Low concentrations of dissolved phase TPH were observed in BHB comprising 420µg/l aromatic C8-C10 and 19µg/l C10-C12. TPH in soil in BHB was not identified at C8-C12 suggesting other soil contamination in these carbon bands may be present locally.

Groundwater sampled from BHD and water collected from the pond to the east of the Site, which are considered likely to be down hydraulic gradient of BHB, did not contain TPH or BTEX compounds.

In the absence of significant contamination, and no identified risk to controlled waters habitat, bioavailability testing was not undertaken.



5.6 Ground gas monitoring results

In undertaking this assessment, we have taken account of current best practice guidance in the assessment of risk posed by hazardous permanent ground gases, including:

- BS8485:2015+A1:2019 "Code of Practice for the Design of protective Measures for Methane and Carbon Dioxide Ground Gases for New Buildings";
- BS8576:2013 "Guidance on Investigations for Ground Gas Permanent Gases and Volatile Organic Compounds (VOCs)";
- CIRIA "Assessing Risks Posed by Hazardous Ground Gases to Buildings", report C665, 2007;
- CIRIA "The VOCs Handbook. Investigating, Assessing and Managing Risks from Inhalation of VOCs at Land Affected by Contamination", report C682, 2009;
- CL:AIRE "A Pragmatic Approach to Ground Gas Risk Assessment", report ref.RB17, November 2012.

Monitoring for hazardous ground gases was undertaken in BHB, BHD and BHE on 4 occasions.

The results of the monitoring undertaken to date are summarised below.

Location	Date	CH ₄	CO2	O ₂	СО	H₂S	Steady	Q _{hg}	Q _{hg}	DTW	Barometric
ID		%v/v	%v/v	%v/v	ppm	ppm	State	CH ₄ *	CO ₂ *	mbgl	Pressure
							Flow	[L/hr]	[L/hr]		mb
							[L/hr]				
BHB	2-7-19	0	0.1	20.4	0	0	<0.1	<0.0001	< 0.0001	0.70	1021
BHD		0	1.5	4.7	0	0	<0.1	<0.0001	<0.0015	1.02	
BHE		0	2.3	15.9	0	0	<0.1	<0.0001	<0.0023	0.74	
BHB	18-7-19	0	0.1	20.5	0	0	<0.1	<0.0001	< 0.0001	0.71	1003
BHD		0	2.3	5.4	0	0	<0.1	<0.0001	<0.0023	0.96	
BHE		0	2.3	16.9	0	0	<0.1	<0.0001	<0.0023	0.76	
BHB	13-8-19	0	0.1	20.2	0	0	<0.1	<0.0001	< 0.0001	NM	1011
BHD		0	2.0	13.9	0	0	<0.1	<0.0001	<0.0020	NM	
BHE			3.1	14.7	0	0	<0.1	<0.0001	<0.0031	NM	
BHB	15-8-19	0	0.1	20.3	0	0	<0.1	<0.0001	< 0.0001	NM	1002
BHD		0	2.3	10.2	0	0	<0.1	<0.0001	<0.0023	NM	
BHE		0	3.2	14.3	0	0	<0.1	<0.0001	<0.0032	NM	

Table 5.6: Gas Monitoring Results

*Steady State Flow Rate assumed to be <0.1 L/h (LOD) where 0.0 L/h indicated on instrument

 Q_{hg} (Quantity of hazardous gas) values for methane and carbon dioxide were calculated in accordance with BS8485 on the basis of measured gas flows and concentrations. Where no detectable values for gas concentrations or flow rates have been observed then assumed values, based on the limit of detection (LoD) of 0.1L/h and 0.1%v/v, respectively, have conservatively been used in order to generate meaningful values for the assessment.



A Q_{hg} value has been calculated based on the 'worst case check' scenario outlined in BS8485 Section 6.3.7.4, in which the plausible worst case condition has been calculated for each hazardous gas by multiplying the maximum recorded flow rate in any standpipe with the maximum gas concentration in any other standpipe.

The derived 'worst case' check Q_{hg} for methane, based on the highest detected steady state concentration of methane (<0.1 %v/v) and the highest plausible steady state flow rate of <0.1L/h. is <0.0001 L/h. The derived 'worst case' check Q_{hg} for carbon dioxide, based on the highest detected steady state concentration of carbon dioxide (3.2%v/v) and the highest plausible steady state flow rate of <0.1L/h. is <0.0032 L/h.

On the basis of the data obtained to date and the risk assessment the site characteristic gas screening value GSV is taken to be the 'worst case' Q_{hg} and so is <0.0032L/h. Based on the Q_{hg} and with reference to Table 2 BS8485 the corresponding characteristic gas situation (CS) is CS1 as defined in BS8485:2015. This indicates a 'very low' potential risk from hazardous ground gas.

Based on the results to date protection against permanent ground gases is unnecessary. However, basic radon protection is required. The design of the measures should be undertaken in consideration of the use and ventilation of the building.

5.7 Updated Conceptual Site Model

Following the Phase 2 investigation an Updated Qualitative Risk Assessment is now presented in Table 5.7 below.



Table 5.7 Updated Qualitative Risk Assessment

Potential Source	Potential Pathway	Potential Receptor	Consequence	Probability	Risk	Comments
S1 Soil	P1: Human Uptake	R1: Construction workers	Medium	Unlikely	Low	Significant or widespread soil contamination
Contamination		R3: End-users	Mild	Unlikely	Very low	was not observed in the boreholes. Slight
	P2: Vertical migration unsaturated zone	R3: End-users	Mild	Unlikely	Very low	exceedances of PAH above selected GAC for commercial use were identified soils although there will be no exposure pathway to end users as the Site will be covered in buildings and hardstanding. Furthermore the Site is to undergo comprehensive re-engineering including the lowering or the elevated platform in the east and raising levels across the rest of the Site to a level approximately 1 to 1.5m higher than current using recycled aggregates processes elsewhere on the Ellgia facility. Any hotspots of hydrocarbon contamination or other suspected forms of contamination can be readily addressed during this work.
	P3: Groundwater	R2: Controlled waters	Medium	Low	Moderate/	Soil contamination with the potential to cause
	migration			likelihood	Low	contamination of groundwater or adjacent
		R3: End-users	Minor	Unlikely	Very low	ponds was not observed in borenoles.
		R4: Construction materials	Mild	Unlikely	Low	to be present and earthworks planning should anticipate the need to prevent mobilising contaminants and protect controlled waters.
	P4 : Direct contact construction materials	R4: Construction materials	Medium	Likely	Moderate	Significant or widespread hydrocarbon and VOC contamination with the potential to impact water supply pipes was not identified during the investigation, however hydrocarbon hotspots are likely to be present



S2: Groundwater	P1: Human Uptake	R1: Construction workers	Mild	Unlikely	Very low	given the historic land use. It is unknown whether water will be required at the new building. Given the former and current use of the Site and surrounding area it would be prudent to upgrade any new water connections to 'protectaline' or similar as a precautionary measure and to place all new underground utilities in a dedicated service trench backfilled with virgin aggregate. Significantly contaminated groundwater was	
Contamination		R3: End-users	Minor	Unlikely	Very low	not observed. Surface water infiltration will	
	P3: Groundwater migration	R2: Controlled waters	Medium	Unlikely	Low	be prevented following development and an apparent hotspots of contaminatio remediated during re-engineering of th development platform. It would b reasonable to assume groundwater qualit will improve following development.	
	P4: Direct contact construction materials	R4 : Construction materials	Mild	Unlikely	Very low		
S3: Off-site	P1: Human Uptake	R1: Construction workers	Mild	Unlikely	Very low	Off-site sourced mobile contamination was	
sourced		R3: End-users	Mild	Unlikely	Very low	not observed in any of the investigation	
contamination	P3: Groundwater	R2: Controlled waters	Medium	Low	Moderate/	locations.	
	migration			likelihood	Low		
	P4: Direct contact construction materials	R4 : Construction materials	Mild	Unlikely	Very low		
S4: ACMs	P1: Human Uptake	R1: Construction workers	Severe	Low likelihood	Moderate	Low concentrations of asbestos were observed in three samples and must be	
		R3: End-users	Medium	Unlikely	Low	assumed to be present in all made ground at	



						the Site. Construction activity will disturb the Made Ground soils and suitable Risk Assessments and Method Statements will need to be put in place by the Contractor to comply with the requirements of the Control of Asbestos Regulations 2012 and CDM 2015.
S5 : Ground Gas	P5: Ground gas migration	R3: End Users	Mild	Low likelihood	Low	Monitoring has determined the Site is classified as CS1 – very low risk. The gas regime at the Site will change after the Site is re-engineered and raised to facilitate development. However infilling materials will comprise homogenous low-organic content recycled aggregates and, while some low levels of carbon dioxide can be anticipated for a short period after infilling, long term gas generation potential will be low. The Site is located in a radon affected area and basic radon protection is required. Assuming adequate protection measures are installed residual risk will be low.



6.0 CONTAMINATION RECOMMENDATIONS

6.1 Remediation

These recommendations are made on the basis of the investigations undertaken to date. Further contamination issues may arise during earthworks and re-engineering which may warrant further investigation or remediation. However, based on available data the concentrations of contaminants detected do not pose a risk to human health in the context of the proposed Commercial land use and identified risks to controlled waters from on-site sourced contamination are also considered low. Slight hydrocarbon and BTEX contamination of a groundwater grab sample from one borehole location was observed which may be indicative of a hotspot of nearby contamination, however the well and pond considered down gradient were unaffected. In the context of the Site's former use as a breakers yard and the heavy industrialised nature of the surrounding land uses the soil, groundwater and pond water at the Site are considered to be surprisingly uncontaminated. Further investigation and remediation of soil and/or groundwater is therefore not considered necessary at this time.

However, given the former use of the Site as a breakers yard over several decades it is considered likely that hotspots of contamination, most likely hydrocarbons, will be encountered during the proposed earthworks. The contractor should be made aware of this potential and have appropriate risk assessments and method statements in place to address such an eventuality prior to breaking ground.

Groundwater is known to be shallow and earthworks and future drainage strategy must be designed cognisant of the possibility of mobilising contamination and potentially impacting the adjacent surface water features.

Protection from permanent ground gases is not required based on monitoring data. The gas regime at the Site will be affected by raising Site levels, however fill will comprise homogenous low-organic content recycled aggregates and, while some low levels of carbon dioxide can be anticipated for a short period after infilling, long term gas generation potential will be low. Protection from permanent ground gases is not required. The Site is in a radon affected area and basic radon protective measures are required for the proposed building. The installation of radon protection is typically validated and approved by Building Control.

Importing Aggregates

Imported aggregates should be validated as suitable for use. The sampling frequency and testing requirements can be found in YALPAG 'Verification for Cover Systems' Ver 3.4, November 2017.



The geochemical suitability of imported materials should be based on generic assessment criteria for a Commercial land use as presented in Table 5.2.

Construction Phase Risks

At construction phase any small risk posed by the soils on Site to ground workers can be adequately and economically mitigated by adopting best practice standards of personal hygiene with appropriate levels of personal protective equipment (PPE) provided.

The presence of asbestos fibres in the made ground has been identified. Although the current risk from asbestos is low the possibility of encountering further asbestos should be considered for the construction phase and suitable risk assessments and method statements provided for compliance with the Control of Asbestos Regulations 2012 and CDM 2015.

In relation to asbestos in soils the determination of whether works are Licensed Work (LW), Non-licensed Work (NLW) or Notifiable Non- licensed Work (NNLW) under CAR 2012 is determined through assessment of the type and condition of asbestos materials present, their condition and likelihood of fibre release above the relevant exposure limit during the specific work activity.

Best practice guidance for asbestos in soil risk assessment and managing asbestos in soil and made ground includes CIRIA C733, C765, and the JIWG/CL:AIRE CARSoil and related Decision Tools. These documents should be used to determine the appropriate actions for asbestos management during the construction phase and the generated management plans should be included in the Construction Phase Health and Safety documents.

A facility for basic dust suppression during excavations and earthworks is strongly recommended.

Precautionary dust sampling and analysis for asbestos during development and across the wider Site should be considered as part of the Health and Safety Management at the facility.

6.2 Other Development Considerations

6.2.1 Buried Water Supply

It is unknown whether new potable water supply will be required in the new building.

If new adoptable connections are proposed the Water Authority usually require analysis of soils in the areas where new supplies are to be installed in accordance with their in-house or UKWIR guidance. Sampling and risk assessment to this standard would be costly and unlikely to demonstrate normal polyethylene pipes would be suitable. It is therefore recommended



that should new water supplies be installed they be upgraded to Protectaline pipe or similar as a precautionary measure.

On any brownfield Site it would be prudent to install all new services in dedicated utilities trenches backfilled with inert material.

6.2.2 Materials Management and Waste Disposal

Final designs including finished levels and cut and fill exercise has yet to be undertaken such that waste streams have not been identified. A formal waste classification exercise has not been undertaken as part of this Assessment. Where it is proposed to discard soils from Site it is recommended that the chemical test results are forwarded to a waste disposal contractor or landfill operator to establish the waste classification. Under the Duty of Care Regulations, the producer of the waste is obliged to ensure that all wastes are disposed of appropriately.

The following applies to uncontaminated natural soils arisings (excludes the made ground at this Site). In accordance with the Regulations *"uncontaminated soil and other naturally occurring material excavated in the course of construction activities where it is certain that the material will be used for the purposes of construction in its natural state on the Site from which it was excavated"*, is excluded from waste regulation by the Waste Framework Directive (2008). Hence, provided there is a planned use for excavated soils they can be reused on Site without a waste permit or exemption provided they meet the required engineering specification.

However, any soils that cannot be accommodated on Site within the works are surplus to requirements and a 'waste' under the Regulations and should only be disposed at a facility or a Site licensed to accept the materials.

If after classification the surplus soils are to be deposited in an inert or hazardous landfill, then Waste Acceptance Criteria (WAC) testing of the surplus materials may be required to confirm compliance with the limits for these materials.



7.0 LIMITATIONS

7.1 General

GD Pickles Ltd (GDP) have prepared this report solely for the use of the Client. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from GDP; a charge may be levied against such approval.

GDP accepts no responsibility or liability for the consequences of this document being used for any purpose or project other than for which it was commissioned or the consequences of this document being used by any third party with whom an agreement has not been executed.

The Client should be aware that property development carries risk and that unidentified development abnormals should be anticipated particularly on brownfield sites with regard to in-ground risks such as contamination, asbestos, waste and underground obstructions/made ground. This Report provides an assessment of the potential and actual ground conditions found based upon the available information and in the context of the scope of works performed. It does not provide a geotechnical, flood, drainage, asbestos, ecological, archaeological or legal assessments or provide advice on other technical matters which may be appropriate when considering site ownership and development. The Client should satisfy itself that it has adequate information on which to make its own decision with regards the commercial and legal merit of acquiring and developing the site. All development risk rests with the developer and owner. GDP will employ all reasonable endeavours to assist the Client manage and mitigate those risks, however, no liability is accepted by GDP for any loss, damages, or consequential or third party losses which may be suffered by the Client from the inappropriate use or misinterpretation of the content of this Report and all liability is limited to that set out in GDP terms and conditions at the time of appointment.

7.2 Phase I Desk Studies and Preliminary Risk Assessments

The work undertaken in producing this report comprised a study of available in-house and third party documented information from a variety of sources (including the Client), together with (where appropriate) a brief walk over inspection of the site and meetings and discussions with relevant authorities and other interested parties. The assessments and opinions given in this report rely on such information and activities and are only relevant to the purpose for which the report was commissioned. Any information reviewed should not be considered exhaustive and has been accepted and used in good faith as providing accurate and representative data pertaining to site conditions. Should additional information become available which may affect the opinions accordingly. It should be noted that any risks identified in a Phase 1 report are perceived risks based on the information reviewed; actual risks can usually only be quantified following a physical investigation of the site.



7.3 Phase II Intrusive Combined Geotechnical and Geoenvironmental Investigations

Depending on the scope instructed the investigation of the site has been carried out to provide sufficient information concerning the type and significance of contamination, geotechnical characteristics, and ground and groundwater conditions to provide a reasonable assessment of the environment risks together with engineering and development implications. If costs have been included in relation to site development professional cost advice should be sought.

The exploratory holes undertaken, which investigate only a small volume of the ground in relation to the size of the site, can only provide a general indication of site conditions. The opinions provided and recommendations given in this report are based on the ground conditions apparent at the site for each of the exploratory holes. There may be ground conditions elsewhere on the site which have not been disclosed by this investigation and which have therefore not been taken into account in this report. Whilst exploratory testing is intended to gain an accurate representation of the site, the very nature of sampling and testing is such that it cannot ensure that all localised conditions are detected.

The comments made on groundwater conditions are based on observations made at the time the site work was conducted. It should be noted that groundwater levels will vary owing to seasonal, tidal and weather related effects. The scope of the investigation was selected on the basis of the specific development proposed by the Client and may be inappropriate to another form of development or scheme.

The risk assessment and opinions provided take into consideration, inter alia, currently available guidance relating to acceptable contamination concentrations; no liability can be accepted for the retrospective effects of any future changes or amendments to these values.


Report produced by:

Ch.

G Pickles Managing Director

Report Checked and Approved by:

pecfor

Jay Fox BEng (Hons) PGDWasteMgmt CGeol EurGeol CEnv MCIWM SiLC FGS Technical Director

GD Pickles Ltd, registered in the UK: 09387115 Biltons Farm, South Scarle Lane Swinderby, Lincoln, LN6 9JA T: 01522 869 040 <u>W: gdpickles.co.uk</u>

APPENDIX 1

Block Plan



Brownfield Consulting & Development GD Pickles Ltd, registered in the UK: 09387115. Biltons Farm, South Scarle Lane, Swinderby, Lincoln, LN6 9JA



APPENDIX 2

Historical Mapping and Groundsure Report



Brownfield Consulting & Development GD Pickles Ltd, registered in the UK: 09387115. Biltons Farm, South Scarle Lane, Swinderby, Lincoln, LN6 9JA



Brownfield Consulting & Development

CENTREMAPS	Groundsure Reference:	CMAPS-GDP-822989-33420-220819		
Worcester, WR14 1UT	Your Reference:	33420		
	Report Date	22 Aug 2019		
	Report Delivery Method:	Email - pdf		

Enviro Insight

Address: 1936A, DN15 0DH

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Enviro Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159 000 quoting the above report reference number.

Yours faithfully,

GD Pickles Ltd

Enc. Groundsure Enviroinsight

Groundsure Enviro Insight

Address:	1936A, DN15 0DH
Date:	22 Aug 2019
Reference:	CMAPS-GDP-822989-33420-220819
Client:	CENTREMAPS

9

LOCATION INTELLIGENCE

NE



S

W

SW

Aerial Photograph Capture date: 21-Apr-2016 Grid Reference: 490290,412139 Site Size: 0.4866ha

Report Reference: CMAPS-GDP-822989-33420-220819 Client Reference: 33420

2

Е





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Overview of Findings

For further details on each dataset, please refer to each individual section in the main report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	5	4	39	108
1.2 Additional Information - Historical Tank Database	0	0	16	234
1.3 Additional Information – Historical Energy Features Database	0	0	1	7
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	0	7
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	2	3	22	48
Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	3	3
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	0	0
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	2
2.2 Records of COMAH and NIHHS sites	0	0	3	2
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	7	6
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0



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Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000- 1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	1	1	0	1	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	1	2	4	3
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	1	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	6	4	1	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	8	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	1	1	20	8	25	8
Section 4: Current Land Use	On-site	e	0-50m	51-25	0 2	51-500
4.1 Current Industrial Sites Data	0		1	11	No	ot searched
4.2 Records of Petrol and Fuel Sites	0		0	0		0
4.3 National Grid Underground Electricity Cables	0		0	0		0
4.4 National Grid Gas Transmission Pipelines	0		0	0		0
Section 5: Geology 5.1 Records of Artificial Ground and Made Ground present beneath			Iden	tified		
the study site 5.2 Records of Superficial Ground and Drift Geology present			Iden	tified		
beneath the study site						
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.						
Section 6: Hydrogeology and Hydrology			0-5	00m		
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site			Iden	tified		
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site			Iden	tified		
	On-site	0-50m	51-250	251-500	501-1000	1000- 2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	4
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	1	0	Not searched	Not searched





0-500m

Section 6: Hydrogeology and Hydrology

	On-site	0-50m	51-250	251-500	501-1000	1000- 1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	8	4	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	Yes	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Enviroment Agency Zone 2 floodplains within 250m of the study site	None identified
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	None identified
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	Very Low
7.4 Flood Defences within 250m of the study site	None identified
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified
7.6 Areas used for Flood Storage within 250m of the study site	None identified
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Limited potential
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	Low

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000- 2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	1
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	0
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	1	1
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

	9	
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LOCATION	N INTELLIGENCE	

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Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000- 2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	1	0	1	0	0	5
8.14 Records of Green Belt land	0	0	0	0	0	0
Section 9: Natural Hazards						
9.1 Maximum risk of natural ground subsidence			Mod	erate		
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site			Negl	igible		

 $9.1.2\,$ Maximum Landslides hazard rating identified on the study site

 $9.1.3\,$ Maximum Soluble Rocks hazard rating identified on the study site

 $9.1.4\,$ Maximum Compressible Ground hazard rating identified on the study site

 $9.1.5\,$ Maximum Collapsible Rocks hazard rating identified on the study site

 $9.1.6\,$ Maximum Running Sand hazard rating identified on the study site

9.2 Radon

9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?

9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?

The site is in a Radon Affected Area, as between 3 and 5% of properties are above the Action Level.

Very Low

Negligible

Moderate

Very Low

Low

Basic radon protective measures are necessary.

Section 10: Mining

10.1 Coal mining areas within 75m of the study site

10.2 Non-Coal Mining areas within 50m of the study site boundary

 $10.3\,$ Brine affected areas within 75m of the study site

None identified

None identified

None identified





Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licences, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.



Energy Features Petrol Stations Historical military Tanks Garages

Groundsure

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1. Historical Industrial Sites

1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 156

ID	Distance [m]	Direction	Use	Date
1A	0	On Site	Railway Sidings	1906
2A	0	On Site	Railway Sidings	1938
3	0	On Site	Railway Sidings	1956
4B	0	On Site	Mineral Railway Sidings	1994
5B	0	On Site	Mineral Railway Sidings	1977
6D	20	E	Railway Building	1956
7C	21	NE	Railway Buildings	1906
8C	21	NE	Railway Buildings	1938
9D	27	SE	Railway Sidings	1948
10C	53	NE	Railway Building	1956
11G	55	SE	Refuse Heap	1977
12	58	NE	Railway Building	1948
13	73	Ν	Railway Building	1956
14E	75	E	Railway Building	1956
15E	77	E	Railway Building	1948
16E	80	E	Railway Buildings	1906
17E	80	E	Railway Buildings	1938
18E	85	E	Railway Building	1956
19E	87	E	Railway Building	1948
20BI	102	S	Tar Distillery	1994
21F	122	E	Refuse Heap	1994
22F	123	E	Refuse Heap	1977
23AT	129	NW	Unspecified Works	1977
24AW	131	NW	Unspecified Works	1994
25G	137	S	Cuttings	1948
26H	139	W	Unspecified Works	1977
27H	139	W	Unspecified Works	1994
281	140	S	Cuttings	1906
291	140	S	Cuttings	1938
30AR	163	NW	Unspecified Tank	1994
31CA	201	Ν	Ironstone Quarries	1906
32J	204	NE	Refuse Heap	1938
33J	204	NE	Refuse Heap	1906
34	213	N	Railway Sidings	1906



LOCATION INTELLIGENCE				
35L	215	Ν	Unspecified Quarry	1885
36K	216	W	Unspecified Heap	1948
37K	216	W	Unspecified Heap	1948
38	219	Ν	Railway Sidings	1906
39CB	220	W	Unspecified Pit	1956
40CC	224	Ν	Ironstone Quarries	1906
41L	225	Ν	Unspecified Quarry	1886
42	229	Ν	Railway Sidings	1906
43CD	233	S	Refuse Heap	1977
44M	240	W	Unspecified Works	1980
45M	240	W	Unspecified Works	1990
46M	240	W	Unspecified Works	1969
470	242	W	Unspecified Heap	1956
48CE	247	W	Cuttings	1969
49N	260	S	Unspecified Commercial/Industrial	1938
50N	260	S	Unspecified Commercial/Industrial	1906
51CF	261	SE	Unspecified Ground Workings	1994
52P	263	NE	Railway Sidings	1906
53CG	268	S	Unspecified Pit	1956
540	269	SW	Unspecified Works	1969
550	269	SW	Unspecified Works	1980
560	269	SW	Unspecified Works	1990
57CH	270	SE	Cuttings	1956
58	272	SE	Iron Works	1886
59P	274	NE	Railway Sidings	1906
60	284	Ν	Railway Sidings	1906
61Q	285	Ν	Engine Shed	1906
62Q	285	Ν	Engine Shed	1948
63R	285	NW	Unspecified Tanks	1994
64R	285	NW	Unspecified Tanks	1977
65S	285	S	Refuse Heap	1906
66S	285	S	Refuse Heap	1938
67T	285	S	Railway Sidings	1906
68T	285	S	Railway Sidings	1938
69Q	286	Ν	Engine Shed	1906
70Q	289	Ν	Engine Shed	1956
71CI	290	S	Ironstone Quarries	1948
72U	295	NW	Unspecified Tank	1977
73U	295	NW	Unspecified Tank	1994
74	296	SE	Iron Works	1885
75CJ	297	S	Unspecified Heap	1956
76BC	298	S	Unspecified Tanks	1994
77CK	303	Ν	Unspecified Heap	1994
78	308	SE	Railway Sidings	1948



79V	312	S	Unspecified Commercial/Industrial	1956
80BE	316	S	Unspecified Tanks	1994
81V	320	S	Tar Distillery	1977
82W	322	SE	Railway Sidings	1938
83W	322	SE	Railway Sidings	1906
84X	329	E	Refuse Heap	1906
85X	329	E	Refuse Heap	1938
86Y	332	W	Unspecified Works	1980
87Y	332	W	Unspecified Works	1990
88AA	333	S	Unspecified Tanks	1994
89BF	334	S	Unspecified Tanks	1994
90Z	336	NW	Unspecified Tanks	1990
91Z	336	NW	Unspecified Tanks	1980
92Z	336	NW	Unspecified Tanks	1969
93CM	342	SW	Refuse Heap	1977
94AA	346	S	Unspecified Tanks	1977
95	362	NW	Railway Sidings	1948
96BL	368	S	Unspecified Tanks	1994
97	371	W	Unspecified Warehouse	1990
98BJ	372	S	Unspecified Tank	1994
99AB	373	E	Refuse Heap	1906
100AB	373	E	Refuse Heap	1938
101AF	377	S	Unspecified Depot	1977
102	378	S	Railway Sidings	1886
103AC	379	S	Cuttings	1938
104AC	379	S	Cuttings	1906
105CN	384	SW	Refuse Heap	1969
106AD	387	S	Unspecified Tanks	1994
107AD	388	S	Unspecified Tanks	1977
108AG	391	S	Unspecified Pit	1994
109AE	394	NE	Unspecified Ground Workings	1977
110AE	394	NE	Unspecified Ground Workings	1994
111AF	394	S	Unspecified Tanks	1977
112AG	398	S	Cuttings	1977
113CO	399	SW	Refuse Heap	1969
114	400	S	Railway Sidings	1885
115AH	406	W	Railway Sidings	1938
116AH	406	W	Railway Sidings	1906
117BQ	413	S	Unspecified Tanks	1994
118	419	SE	Railway Sidings	1886
119AI	423	S	Unspecified Tanks	1994
120BW	424	SW	Unspecified Depots	1990
121	424	NE	Railway Sidings	1906
122AI	428	S	Unspecified Tanks	1948



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123	429	NW	Railway Sidings	1906
124AI	430	S	Unspecified Tanks	1977
125AI	430	S	Unspecified Tanks	1956
126	437	S	Iron Foundry	1906
127AJ	439	S	Cuttings	1948
128BX	441	SW	Garage	1969
129	441	SE	Railway Sidings	1885
130AJ	442	S	Cuttings	1906
131AJ	442	S	Cuttings	1938
132AK	447	SW	Unspecified Works	1977
133AK	447	SW	Unspecified Works	1994
134AL	459	W	Cuttings	1906
135AL	459	W	Cuttings	1938
136AM	463	W	Unspecified Quarry	1886
137AM	465	W	Unspecified Quarry	1885
138AN	465	W	Timber Yard	1990
139AN	465	W	Timber Yard	1980
140BT	467	S	Unspecified Tanks	1977
141CP	468	W	Unspecified Ground Workings	1969
142	470	S	Unspecified Foundry	1977
143CQ	471	E	Cuttings	1948
144	473	SW	Unspecified Depots	1990
145AO	479	E	Cuttings	1938
146AO	479	E	Cuttings	1906
147AP	479	S	Unspecified Pit	1948
148AP	479	S	Unspecified Pit	1948
149AP	480	S	Unspecified Pit	1938
150AP	482	S	Unspecified Pit	1906
151AQ	485	S	Unspecified Tank	1948
152AQ	487	S	Unspecified Tanks	1994
153AQ	487	S	Unspecified Tank	1977
154AQ	487	S	Unspecified Tank	1956
155AP	488	S	Unspecified Tanks	1977
156CR	498	S	Unspecified Pit	1886

1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary:

250

ID	Distance (m)	Direction	Use	Date



157AR	154	NW	Unspecified Tank	1997
158AR	155	NW	Unspecified Tank	1990
159AS	214	NW	Unspecified Tank	1975
160AS	214	NW	Unspecified Tank	1990
161AS	214	NW	Unspecified Tank	1997
162AT	223	NW	Tanks	1975
163AT	223	NW	Tanks	1990
164AU	230	W	Unspecified Tank	1964
165AU	230	W	Unspecified Tank	1964
166AV	233	NW	Unspecified Tank	1975
167AV	233	NW	Unspecified Tank	1990
168AV	233	NW	Unspecified Tank	1997
169AW	245	NW	Unspecified Tank	1990
170AW	246	NW	Unspecified Tank	1975
171AW	250	NW	Tanks	1990
172AW	250	NW	Unspecified Tank	1997
173AW	253	NW	Tanks	1975
174AX	255	S	Unspecified Tank	1994
175AX	256	S	Unspecified Tank	1986
176AW	258	NW	Tanks	1975
177AW	258	NW	Tanks	1990
178AW	258	NW	Unspecified Tank	1997
179AW	264	NW	Tanks	1990
180AW	264	NW	Tanks	1997
181AW	264	NW	Tanks	1975
182	264	NW	Unspecified Tank	1975
183R	269	NW	Unspecified Tank	1990
184R	269	NW	Unspecified Tank	1975
185R	269	NW	Unspecified Tank	1997
186AY	270	W	Tanks	1979
187AY	271	W	Tanks	1976
188AY	271	W	Tanks	1991
189AY	271	W	Tanks	1988
190AX	273	S	Unspecified Tank	1994
191AX	274	S	Unspecified Tank	1986
192AZ	275	NW	Tanks	1988
193AZ	275	NW	Tanks	1964
194AZ	275	NW	Tanks	1975
195AZ	276	NW	Tanks	1990
196AZ	276	NW	Tanks	1964
197R	276	NW	Tanks	1997
198AZ	276	NW	Tanks	1997
199BA	279	S	Unspecified Tank	1994
200BA	280	S	Unspecified Tank	1986
201BA	284	S	Tanks	1994
202R	286	NW	Tanks	1990



203R	286	NW	Tanks	1975
204BB	286	NW	Unspecified Tank	1997
205R	286	NW	Unspecified Tank	1997
206BA	290	S	Tanks	1986
207BA	292	S	Unspecified Tank	1994
208U	293	NW	Unspecified Tank	1988
209BA	293	S	Unspecified Tank	1986
210R	293	NW	Tanks	1990
211U	294	NW	Unspecified Tank	1990
212R	294	NW	Tanks	1975
213U	294	NW	Unspecified Tank	1964
214U	294	NW	Unspecified Tank	1964
215U	294	NW	Unspecified Tank	1975
216U	294	NW	Unspecified Tank	1997
217BB	296	NW	Tanks	1997
218AZ	296	NW	Tanks	1963
219AZ	296	NW	Tanks	1979
220AZ	296	NW	Tanks	1964
221AZ	296	NW	Tanks	1976
222AZ	296	NW	Tanks	1991
223AZ	296	NW	Tanks	1988
224AZ	297	NW	Tanks	1995
225R	301	NW	Tanks	1975
226BC	304	S	Tanks	1994
227R	304	NW	Unspecified Tank	1975
228R	304	NW	Unspecified Tank	1964
229R	304	NW	Unspecified Tank	1964
230R	305	NW	Unspecified Tank	1991
231R	305	NW	Unspecified Tank	1988
232R	305	NW	Unspecified Tank	1976
233R	305	NW	Unspecified Tank	1964
234R	305	NW	Unspecified Tank	1979
235R	305	NW	Unspecified Tank	1963
236BC	306	S	Tanks	1986
237	306	NW	Unspecified Tank	1997
238R	308	NW	Unspecified Tank	1990
239R	308	NW	Unspecified Tank	1975
240R	308	NW	Unspecified Tank	1997
241R	313	NW	Unspecified Tank	1990
242R	313	NW	Unspecified Tank	1997
243R	313	NW	Unspecified Tank	1975
244BD	314	NW	Tanks	1988
245BD	314	NW	Tanks	1991
246R	315	NW	Unspecified Tank	1963
247R	315	NW	Unspecified Tank	1964
248BE	320	S	Tanks	1994



249BE	321	S	Unspecified Tank	1986
250BE	327	S	Unspecified Tank	1986
251BD	331	NW	Tanks	1976
252BD	331	NW	Tanks	1964
253BD	331	NW	Tanks	1963
254BD	331	NW	Tanks	1979
255BD	332	NW	Tanks	1991
256BD	332	NW	Tanks	1988
257BE	333	S	Unspecified Tank	1986
258BF	336	S	Unspecified Tank	1994
259BD	337	NW	Tanks	1964
260BD	337	NW	Tanks	1976
261BD	338	NW	Tanks	1963
262BD	338	NW	Tanks	1979
263BD	338	NW	Tanks	1991
264BD	338	NW	Tanks	1988
265AA	338	S	Tanks	1994
266BF	339	S	Unspecified Tank	1986
267BF	339	S	Unspecified Tank	1994
268Z	340	NW	Unspecified Tank	1964
269Z	340	NW	Unspecified Tank	1976
270Z	340	NW	Unspecified Tank	1963
271Z	340	NW	Unspecified Tank	1979
272BE	341	S	Unspecified Tank	1994
273AA	341	S	Tanks	1986
274Z	341	NW	Unspecified Tank	1988
275Z	341	NW	Unspecified Tank	1991
276Z	342	NW	Unspecified Tank	1995
277BE	342	S	Unspecified Tank	1986
278AA	347	S	Tanks	1973
279AA	347	S	Tanks	1973
280BG	347	W	Unspecified Tank	1976
281BG	348	W	Unspecified Tank	1991
282BG	348	W	Unspecified Tank	1988
283BG	348	W	Unspecified Tank	1995
284BN	352	NW	Unspecified Tank	1995
285BM	352	S	Gas Depot	1973
286Z	353	NW	Tanks	1976
287Z	353	NW	Tanks	1964
288Z	354	NW	Tanks	1963
289Z	354	NW	Tanks	1979
290Z	354	NW	Tanks	1995
291Z	355	NW	Tanks	1988
292Z	355	NW	Tanks	1991
293BH	355	S	Tanks	1973
294BH	356	S	Tanks	1973



295BH	358	S	Tanks	1986
296BI	358	S	Tanks	1994
297BJ	359	S	Unspecified Tank	1994
298BH	360	S	Unspecified Tank	1986
299BH	360	S	Tanks	1973
300BH	362	S	Tanks	1986
301BH	362	S	Tanks	1973
302BH	363	S	Tanks	1973
303BH	364	S	Tanks	1986
304BK	366	NW	Unspecified Tank	1976
305BK	366	NW	Unspecified Tank	1995
306BK	367	NW	Unspecified Tank	1988
307BK	367	NW	Unspecified Tank	1991
308BH	368	S	Unspecified Tank	1973
309BH	369	S	Unspecified Tank	1973
310BL	369	S	Tanks	1994
311BH	370	S	Unspecified Tank	1986
312BH	371	S	Tanks	1973
313BL	372	S	Tanks	1986
314BI	373	S	Tanks	1986
315BM	373	S	Gas Depot	1973
316BO	374	NW	Unspecified Tank	1997
317BH	375	S	Tanks	1986
318BN	376	NW	Unspecified Tank	1995
319BJ	380	S	Tanks	1973
320BJ	380	S	Unspecified Tank	1994
321BJ	380	S	Tanks	1973
322BJ	381	S	Unspecified Tank	1986
323BO	381	NW	Unspecified Tank	1995
324BJ	382	S	Unspecified Tank	1994
325BJ	383	S	Unspecified Tank	1986
326BJ	390	S	Tanks	1973
327AD	394	S	Tanks	1973
328AD	394	S	Tanks	1964
329AD	395	S	Tanks	1964
330AD	395	S	Tanks	1973
331AD	395	S	Tanks	1994
332AF	395	S	Tanks	1973
333AD	396	S	Tanks	1986
334AF	396	S	Tanks	1973
335AF	400	S	Tanks	1964
336	400	NW	Unspecified Tank	1995
337AF	400	S	Tanks	1964
338BP	401	S	Tanks	1973
339BP	401	S	Tanks	1994
340BP	401	S	Tanks	1973



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341BP	403	S	Tanks	1986
342AD	403	S	Unspecified Tank	1973
343AD	403	S	Unspecified Tank	1964
344AD	404	S	Unspecified Tank	1994
345AD	404	S	Unspecified Tank	1973
346AD	405	S	Unspecified Tank	1973
347AD	405	S	Unspecified Tank	1964
348AD	405	S	Unspecified Tank	1986
349AD	405	S	Unspecified Tank	1973
350AD	406	S	Tanks	1973
351AD	406	S	Tanks	1994
352AD	406	S	Tanks	1973
353AD	407	S	Tanks	1986
354AF	408	S	Tanks	1973
355AF	408	S	Tanks	1964
356AF	408	S	Tanks	1973
357AD	409	S	Unspecified Tank	1973
358AD	410	S	Unspecified Tank	1973
359AD	410	S	Unspecified Tank	1994
360AD	411	S	Unspecified Tank	1986
361BQ	415	S	Unspecified Tank	1994
362BQ	416	S	Unspecified Tank	1986
363	421	S	Unspecified Tank	1994
364AI	428	S	Tanks	1964
365AI	428	S	Tanks	1973
366BQ	429	S	Unspecified Tank	1964
367BQ	429	S	Tanks	1973
368AI	429	S	Tanks	1994
369AI	430	S	Tanks	1986
370AI	438	S	Tanks	1973
371AI	439	S	Tanks	1973
372AI	439	S	Tanks	1994
373AI	440	S	Tanks	1986
374AI	447	S	Tanks	1973
375AI	447	S	Tanks	1964
376BR	462	S	Unspecified Tank	1973
377BR	463	S	Unspecified Tank	1973
378	463	S	Tanks	1986
379BS	466	S	Tanks	1973
380BS	467	S	Tanks	1973
381BS	467	S	Tanks	1986
382BT	468	S	Unspecified Tank	1973
383BT	468	S	Unspecified Tank	1964
384BT	469	S	Unspecified Tank	1964
385BT	469	S	Gasometer	1973
386BU	480	S	Tanks	1986



387BT	482	S	Unspecified Tank	1973
388BT	482	S	Unspecified Tank	1973
389BU	483	S	Tanks	1973
390BU	484	S	Unspecified Tank	1986
391BU	484	S	Tanks	1973
392BV	484	S	Tanks	1964
393BV	484	S	Gasholders	1973
394BV	484	S	Gasholders	1986
395BV	485	S	Gasholders	1994
396BV	485	S	Gasholders	1973
397BV	485	S	Tanks	1964
398BS	487	S	Unspecified Tank	1973
399BS	488	S	Unspecified Tank	1973
400BU	491	S	Tanks	1973
401BU	491	S	Tanks	1964
402BU	491	S	Tanks	1964
403BU	491	S	Tanks	1973
404BU	492	S	Tanks	1973
405BU	492	S	Tanks	1986
406BU	499	S	Tanks	1973

1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary:

8

ID	Distance (m)	Direction	Use	Date
407	191	W	Electricity Substation	1997
408BM	352	S	Gas Depot	1973
409BM	373	S	Gas Depot	1973
410BT	469	S	Gasometer	1973
411BV	484	S	Gasholders	1973
412BV	484	S	Gasholders	1986
413BV	485	S	Gasholders	1994
414BV	485	S	Gasholders	1973

1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.





7

Records of historical petrol stations and fuel sites within 500m of the search boundary:

Database searched and no data found.

1.5 Additional Information - Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary:

Distance (m) ID Direction Use Date 415 373 W 1995 Garage 416BW 418 1990 SW Garage 417BX 440 SW Garage 1990 418BX 440 SW 1990 Garage 419BX 441 SW Garage 1975 420BX 441 SW 1966 Garage 421BX SW 1983 446 Garage

1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary:

0

Database searched and no data found.

1.7 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 75

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:

ID	Distance(m)	Direction	Use	Date
422BY	0	On Site	Pond	1977
423BY	0	On Site	Pond	1994
424BZ	41	NE	Water Body	1977
425BZ	41	NE	Water Body	1994
426AX	45	SE	Pond	1956
427G	55	SE	Refuse Heap	1977



428	102	S	Ponds	1994
429	103	S	Ponds 1977	
430F	122	E	Refuse Heap 1994	
431F	123	E	Refuse Heap	1977
432G	137	S	Cuttings	1948
4331	140	S	Cuttings	1906
4341	140	S	Cuttings	1938
435CA	201	Ν	Ironstone Quarries	1906
436J	204	NE	Refuse Heap	1906
437J	204	NE	Refuse Heap	1938
438L	215	Ν	Unspecified Quarry	1885
439K	216	W	Unspecified Heap	1948
440K	216	W	Unspecified Heap	1948
441CB	220	W	Unspecified Pit	1956
442CC	224	Ν	Ironstone Quarries	1906
443L	225	Ν	Unspecified Quarry	1886
444CD	233	S	Refuse Heap	1977
4450	242	W	Unspecified Heap	1956
446CE	247	W	Cuttings	1969
447AU	249	W	Reservoir	1980
448AU	249	W	Reservoir	1990
449CF	261	SE	Unspecified Ground Workings	1994
450CG	268	S	Unspecified Pit	1956
451CH	270	SE	Cuttings	1956
452	272	SE	Pond	1886
453S	285	S	Refuse Heap	1938
454S	285	S	Refuse Heap	1906
455	286	NE	Water Body	1977
456	289	NE	Water Body	1994
457CI	290	S	Ironstone Quarries	1948
458	296	SE	Pond	1885
459CJ	297	S	Unspecified Heap	1956
460CK	303	Ν	Unspecified Heap	1994
461CL	320	Ν	Pond	1977
462CL	320	Ν	Pond	1994
463X	329	E	Refuse Heap	1906
464X	329	E	Refuse Heap	1938
465CM	342	SW	Refuse Heap	1977
466	352	NE	Pond	1956
467	372	E	Pond	1977
468AB	373	E	Refuse Heap	1906
469AB	373	E	Refuse Heap 1938	
470AC	379	S	Cuttings	1906
471AC	379	S	Cuttings	1938
472CN	384	SW	Refuse Heap	1969

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473AG	391	S	Unspecified Pit	1994
474AE	394	NE	Unspecified Ground Workings	1977
475AE	394	NE	Unspecified Ground Workings	1994
476AG	398	S	Cuttings	1977
477CO	399	SW	Refuse Heap	1969
478AJ	439	S	Cuttings	1948
479	439	NE	Pond	1977
480AJ	442	S	Cuttings	1906
481AJ	442	S	Cuttings	1938
482AL	459	W	Cuttings	1906
483AL	459	W	Cuttings	1938
484AM	463	W	Unspecified Quarry	1886
485BX	464	SW	Pond	1886
486AM	465	W	Unspecified Quarry	1885
487CP	468	W	Unspecified Ground Workings	1969
488CQ	471	E	Cuttings	1948
489AO	479	E	Cuttings	1906
490AO	479	E	Cuttings	1938
491AP	479	S	Unspecified Pit	1948
492AP	479	S	Unspecified Pit	1948
493AP	480	S	Unspecified Pit	1938
494AP	482	S	Unspecified Pit	1906
495	482	SW	Pond	1885
496CR	498	S	Unspecified Pit	1886





2. Environmental Permits, Incidents and Registers Map







2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

Database searched and no data found.

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

Database searched and no data found.

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

0

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0

Database searched and no data found.



The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details		
14	96	Ν	490218 412268	Address: Ellgia Ltd., Winterton Road, Scunthorpe, DN15 0DH Process: Combustion & Incineration Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified	
15E	190	W	490044 412158	Address: Nationwide Crash Repair Centres, Winterton Road, Scunthorpe, North Lincolnshire, DN15 3LD Process: Respraying of Road Vehicles Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified	
16	239	W	490012 412052	Address: Winterton Road, Scunthorpe, South Humberside, DN15 0BA Process: Other Mineral Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified	
17	338	W	489896 412115	Address: Lafarge Tarmac Trading Limited, Warren Road, Scunthorpe, DN15 6XH Process: Use of Bulk Cement Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified	
18	477	SW	489865 411839	Address: Stoneacre Motor Group, Scunthorpe, Winterton Road, Scunthorpe, DN15 6AH Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified	
19	483	SW	489891 411802	Address: Winterton Road, Scunthorpe, South Humberside, DN15 6AH Process: Unloading of Petrol into Storage at Service Stations Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified	

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

Database searched and no data found.

Database searched and no data found.

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

The following records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distanc e (m)	Directio n	Application Reference Number	NGR	Applicatio n Status	Application Date	Address	Details	Details of Enforcement Action
27G	260	NW	No Details	490048 412343	Approved	No Details	BOC Limited, Warren Road, Scunthorpe, North Lincolnshire, England, DN15 6XH	No Details	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
28H	405	S	PA/2003/02 55	490200 411720	Approved	03/09/2003	Koppers UK Limited, Dawes Lane, Scunthorpe, North Lincolnshire, England, DN15 6UR	Hazardous Substances Consent For The Storage Of Products In Connection With The Tar Distillation Process Described Under Entry Numbers Of Schedule 1 Of The Planning (hazardous Substances) Regulations 1992 (as Laid Out In The Schedule Attached To This	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified

Groundsure LOCATION INTELLIGENCE 2.1.8 Records of Licensed Discharge Consents within 500m of the study site:



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2





Records of COMAH & NIHHS sites within 500m of the study site:

The following COMAH & NIHHS Authorisation records provided by the Health and Safety Executive are represented as polygons or buffered points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	Company	Address	Operational Status	Tier
20	132	NW	BOC Limited	BOC Limited, Scunthorpe, Warren Road, Scunthorpe, North Lincolnshire, DN15 6XH	Current COMAH Site	COMAH Lower Tier Operator
21E	139	W	Boc Ltd	Boc Ltd, Warren Road, Scunthorpe, DN15 6XH	Historical COMAH Site	-
22	218	S	British Steel Limited	British Steel Limited, Scunthorpe, Brigg Road, Scunthorpe, Lincolnshire, DN16 1AX	Current COMAH Site	COMAH Lower Tier Operator
23F	252	S	Bitmac Limited	Bitmac Limited, Dawes Lane, Scunthorpe, DN15 6UR	Historical NIHHS Site	-
24F	252	S	British Gas	British Gas, Dawes Lane, Scunthorpe	Historical NIHHS Site	-

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

13

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details		
1	102	Ν	490335.0 412261.0	Incident Date: 29-Aug-2013 Incident Identification: 1153442.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 2 (Significant) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)	
2A	163	Ν	490311.0 412331.0	Incident Date: 07-Feb-2011 Incident Identification: 856375.0 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 3 (Minor) Land Impact: Category 2 (Significant) Air Impact: Category 3 (Minor)	
3A	163	Ν	490311.0 412331.0	Incident Date: 07-Feb-2011 Incident Identification: 856375.0 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 3 (Minor) Land Impact: Category 2 (Significant) Air Impact: Category 3 (Minor)	
4E	180	W	490053.0 412151.0	Incident Date: 17-Aug-2011 Incident Identification: 914353.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Effects on Humans	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)	
5B	193	W	490044.0 412105.0	Incident Date: 07-Jun-2013 Incident Identification: 1119814.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 2 (Significant)	
6B	201	W	490039.0	Incident Date: 06-May-2014	Water Impact: Category 4 (No Impact)	







ID	Distance (m)	Direction	NGR	Details		
			412091.0	Incident Identification: 1233232.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Land Impact: Category 3 (Minor) Air Impact: Category 2 (Significant)	
7	205	W	490036.0 412084.0	Incident Date: 08-Oct-2012 Incident Identification: 1045420.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)	
8C	282	S	490418.0 411829.0	Incident Date: 23-Dec-2005 Incident Identification: 367577.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 2 (Significant)	
9C	287	S	490418.0 411824.0	Incident Date: 29-Dec-2005 Incident Identification: 368124.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 2 (Significant)	
10	296	SW	489986.0 411980.0	Incident Date: 13-Jul-2012 Incident Identification: 1013378.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)	
11D	416	S	490234.0 411698.0	Incident Date: 30-May-2003 Incident Identification: 161838.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	
12D	430	S	490229.0 411684.0	Incident Date: 29-May-2003 Incident Identification: 161688.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Chemical Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	
13	432	S	490300.0 411670.0	Incident Date: 11-Aug-2003 Incident Identification: 181078.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

Database searched and no data found.



Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site 0

Database searched and no data found.





3. Landfill and Other Waste Sites Map



Landfill Records




3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

3

The following Environment Agency/Natural Resources Wales landfill records are represented as polygons on the Landfill and Other Waste Sites map:

ID Distance Direction NGR (m)		Details			
2	47	SE	490244 411534	Address: Dawes Lane, Scunthorpe, N Lincolnshire, DN15 6UR Landfill Reference: 43125.0 Environmental Permitting Regulations (Waste) Reference: ICL001 Landfill Type: A07: Industrial Waste Landfill (Factory curtilage)	Operator: Industrial Chemicals Limited Status: Transferred IPPC Reference: EPR Reference:
3	153	E	491041 412238	Address: Crosby Warren Landfill, Brigg Road, Scunthorpe, N Lincolnshire, DN16 1BP Landfill Reference: 43097.0 Environmental Permitting Regulations (Waste) Reference: TAT009 Landfill Type: A07: Industrial Waste Landfill (Factory curtilage)	Operator: British Steel Limited Status: Modified IPPC Reference: EPR Reference:
Not shown	799	NE	491050 413050	Address: Crosby North Landfill Site, Dawes Lane, Scunthorpe, North Lincolnshire, DN15 6UW Landfill Reference: 0.0 Environmental Permitting Regulations (Waste) Reference: - Landfill Type: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE	Operator: British Steel Ltd Status: Effective IPPC Reference: EPR Reference:

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

10

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Detai	ils
13	238	S		Site Address: Trent Remine, Dawes Lane, Scunthorpe, North Lincolnshire	Licence Issue: 22-Apr-1986 Licence Surrendered: 11-Oct-1993



Brownfield Consulting & Development

ID	Distance (m)	Direction	NGR	Details		
				Waste Licence: Yes Site Reference: 55/19/0715, A715 Waste Type: Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Holder Address: - Operator: - Licence Holder: British Steel Corporation First Recorded: 31-Dec-1985 Last Recorded: 11-Oct-1993	
14	265	W		Site Address: Glebe Pit, Glebe Road, Scunthorpe, N Lincolnshire Waste Licence: Yes Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: BA1/L/ONW002	Licence Issue: 08-Dec-1978 Licence Surrendered: 10-Jan-2008 Licence Holder Address: Road 4, Grimsby, S Humberside Ind Est, Lincolnshire Operator: Onward Holdings Ltd Licence Holder: Onward Holdings Ltd First Recorded: - Last Recorded: -	
15K	284	SW		Site Address: Hornsby & Goodwin Ltd, Winterton Road, Scunthorpe, , N Lincolnshire Waste Licence: Yes Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 24-May-1977 Licence Surrendered: Licence Holder Address: 25 Church Street, Brigg, Elsham, N Lincolnshire Operator: Hornsby & Goodwyn Ltd Licence Holder: Hornsby & Goodwyn Ltd First Recorded: - Last Recorded: -	
16	527	W		Site Address: Scunthorpe, Bessemer Way, Scunthorpe, North Lincolnshire Waste Licence: Yes Site Reference: A956, L320, 55/19/0956, 2000/5473 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: BC1/L/EAS005	Licence Issue: 24-Jul-1996 Licence Surrendered: 22-Jun-2000 Licence Holder Address: Wakefield Road, Ackworth, West Yorkshire Operator: - Licence Holder: East Lincolnshire Properties Limited First Recorded: 31-Dec-1996 Last Recorded: -	
Not shown	740	Ν		Site Address: Winterton Road Tip, Winterton Road, Scunthorpe Waste Licence: Yes Site Reference: 55/30/173, 55/19/0173 Waste Type: Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 15-May-1978 Licence Surrendered: 30-Apr-1986 Licence Holder Address: Scunthorpe Works, PO Box 1, Scunthorpe, South Humberside Operator: British Steel Corporation Licence Holder: British Steel Corporation First Recorded: 31-Dec-1947 Last Recorded: 31-Dec-1986	
Not shown	880	SE		Site Address: Scunthorpe,- Firth Brown, Dawes Lane, Site A, Scunthorpe Waste Licence: Yes Site Reference: 1612, 55/19/0161, 4308, 448, 2000/5029 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 01-Jun-1977 Licence Surrendered: 10-Mar-1993 Licence Holder Address: - Operator: - Licence Holder: Firth Brown Castings Limited First Recorded: 31-Dec-1920 Last Recorded: 31-Dec-1993	
Not shown	942	Ν		Site Address: Winterton Road, Scunthorpe Waste Licence: - Site Reference: 55/19/0173 Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -	
Not shown	1121	E		Site Address: Dawes Lane Site B - Firth Brown, Scunthorpe Waste Licence: Yes Site Reference: 55/19/0161, 4307, 55/19/0161, 449 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 01-Jun-1977 Licence Surrendered: Licence Holder Address: Dawes Lane, Scunthorpe, South Humberside Operator: - Licence Holder: Firth Brown Castings Limited First Recorded: 31-Dec-1927 Last Recorded: 31-Dec-1983	
Not	1393	N		Site Address: Dragonby Landfill,	Licence Issue: 09-Jul-1990	





ID	Distance (m)	Direction	NGR	Details	
shown				Normanby Raod, Scunthorpe Waste Licence: Yes Site Reference: A777 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Surrendered: 28-Apr-1994 Licence Holder Address: Stockley Road, West Drayton, Middlesex Operator: - Licence Holder: Drinkwater Sabey Limited First Recorded: 09-Jul-1990 Last Recorded: 28-Apr-1994
Not shown	1422	S		Site Address: Cottage Beck Road, Cottage Beck Road, Scunthorpe Waste Licence: - Site Reference: 4123, 454, 55/19/18, 55/17/0018 Waste Type: Inert, Commercial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Scunthorpe Borough Council Licence Holder: - First Recorded: 31-Dec-1961 Last Recorded: 01-May-1978

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

1

The following landfill records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
1J	414	SW	490000.0 411800.0	Address: Hornsby and Goodwyn, Dawes Lane, Scunthorpe, Humb BGS Number: 773.0	Risk: No risk to aquifer Waste Type: N/A

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

11

The following landfill records are represented as points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
86	126	E	490486 412125	Refuse Tip	1963 mapping	Polygon
87	147	SE	490453 411951	Refuse Tip	1963 mapping	Polygon
88	196	SE	490454 411929	Refuse Tip	1972 mapping	Polygon
89	228	E	490671 412166	Refuse Tip	1996 mapping	Polygon
901	233	S	490146 411844	Refuse Tip	1972 mapping	Polygon
911	248	SW	490147 411840	Refuse Tip	1963 mapping	Polygon
92J	342	SW	490024 411802	Refuse Tip	1972 mapping	Polygon





ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
93K	365	SW	489982 411859	Refuse Tip	1974 mapping	Polygon
94	368	SW	489874 411917	Refuse Tip	1966 mapping	Polygon
95G	400	SW	489976 411820	Refuse Tip	1966 mapping	Polygon
96	653	E	491310 412541	Refuse Tip	1996 mapping	Polygon

3.2 Other Waste Sites

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

8

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR		Details	
5A	51	NW	490213 412245	Type of Site: Waste Control Building (Extension) Site Address: Bell Waste, Pit Bottom, Winterton Road, SCUNTHORPE, Humberside, DN15 0DH	Planning Application Reference: PA/2003/0798 Date: -	Further Details: Scheme comprises of an extension to waste control building. An application (ref: PA/2003/0798) for Detailed Planning permission was submitted to North Lincolnshire B.C. on 6th June 2003. Data Source: Historic Planning Application Data Type: Point
6A	51	NW	490213 412245	Type of Site: Waste Control (Extension)/Portabl e Building Site Address: Pitts Bottom, Winterton Road, SCUNTHORPE, Humberside, DN15 0DH	Planning Application Reference: PA/2003/1371 Date: -	Further Details: Scheme comprises of an extension to waste control building to house equipment and installation of portable building to provide mess facilities. Construction - internal partitions walls; bathroom fittings. An application (ref: PA/2003/1371) for Detailedlanning permission was granted by North Lincolnshire B.C. on 9th December 2003. Planning decision obtained Data Source: Historic Planning Application Data Type: Point
7A	51	NW	490213 412245	Type of Site: Waste Transfer Station (Alterations) Site Address: Bell Waste Control, Winterton Road, SCUNTHORPE, Humberside, DN15 0DH	Planning Application Reference: WD/2004/0926 Date: -	Further Details: Scheme comprises planning permission for land raising with inert waste. An application (ref: WD/2004/0926) for Detailed Planning permission was submitted to North Lincolnshire B.C. on 15th June 2004. Data Source: Historic Planning

9
Groundsure
LOCATION INTELLIGENCE



ID	Distance (m)	Direction	NGR	Details		
						Application Data Type: Point
8A	51	NW	490213 412245	Type of Site: Waste Transfer Station Site Address: Bell Waste Control, Winterton Road, SCUNTHORPE, Humberside, DN15 0DH	Planning Application Reference: PA/2007/0911 Date: -	Further Details: Scheme comprises construction of a new unit to house bailer and conveyor to allow for the recycling of cardboard. An application (ref: PA/2007/0911) for detailed planning permission was granted by North Lincolnshire B.C. Planning decision obtained Data Source: Historic Planning Application Data Type: Point
9	95	Ν	490216 412293	Type of Site: Waste Transfer Station Site Address: Winterton Road, Winterton Road, SCUNTHORPE, Humberside, DN15	Planning Application Reference: 6/94/0202 Date: -	Further Details: An application (ref: 6/94/0202) for Detailed Planning permission was submitted to North Lincolnshire B.C. on 16th June 1994. Construction - 1 (maybe) doors. Data Source: Historic Planning Application Data Type: Point
10	176	W	490038 412091	Type of Site: Waste Transfer Station Site Address: Thompson Metals, Winterton Road, SCUNTHORPE, Humberside, DN15 0DH	Planning Application Reference: PA/2006/0554 Date: -	Further Details: Scheme comprises of construction of a steel framed waste transfer building. Construction - pitched roof; brick, metal cladding walls; metal cladding roof; roller shutter doors; portal, steel frame. An application (ref: PA/2006/0554) for detailed plannipermission was granted by North Lincolnshire B.C. Tender details remain to be finalised. Scheme complete. Data Source: Historic Planning Application Data Type: Point
11	210	SW	490022 412037	Type of Site: Waste Transfer Station Site Address: Thompson Group, Winterton Road, SCUNTHORPE, Humberside, DN15 0DH	Planning Application Reference: PA/2010/1474 Date: 13/06/2011	Further Details: Scheme comprises construction of a lean-to extension. Construction - composite frame. An application (ref: PA/2010/1474) for detailed planning permission was granted by North Lincolnshire B.C. Tenders have been returned. The start date, contract perind project value are for guideline only. Tenders have been returned. Data Source: Historic Planning Application Data Type: Point
12C	231	S	490398 411850	Type of Site: Recycling Facility Site Address: Trent Remine,Off Dawes Lane, Access Road, s In Quarry,	Planning Application Reference: WD/2006/1650 Date: -	Further Details: Scheme comprises construction of an inert waste and soil recycling facility. An application (ref: WD/2006/1650) for detailed planning permission was



ID



Distance (m) Direction

Details

SCUNTHORPE, Humberside, DN15 6UW

NGR

granted by North Lincolnshire B.C. Planning decision obtained Data Source: Historic Planning Application Data Type: Point

3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

63

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details		
23	0	On Site	490324 412143	Site Address: A C Autos Pit Bottom, Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Metal Recycling Site (mixed MRS's) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CAR001 EPR reference: EA/EPR/WP3297FF/A001 Operator: Carrington A J Waste Management licence No: 43100 Annual Tonnage: 5000.0	Issue Date: 22/02/1994 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Ac Autos Pit Bottom Correspondence Address: -	
24	30	NW	490232 412202	Site Address: Pit Bottom, Winterton Road, Scunthorpe, North Lincs, DN15 0DH Type: Special Waste Transfer Station Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU003 EPR reference: - Operator: J E Churchill (Plant) Ltd Waste Management licence No: 43465 Annual Tonnage: 70610.0	Issue Date: 26/05/2000 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Pit Bottom Correspondence Address: Cleatham Road, Kirton Lindsey, Gainsborough, Lincolnshire, DN21 4JR	
25	75	SW	490186 412084	Site Address: Pit Bottom, Off Winterton Road, Scunthorpe, Nth Lincolnshir Type: Physical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JEC001 EPR reference: - Operator: J E Churchill (Plant) Limited Waste Management licence No: 43719 Annual Tonnage: 0.0	Issue Date: 08/09/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Pit Bottom Correspondence Address: Anston House, Ryton Road, North Anston, Sheffield, South Yorkshire, S25 4DL	
26	85	W	490153 412171	Site Address: Winterton Pit Bottom, Winterton Road, Scunthorpe, Lincolnshire, DN15 0DH Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU002 EPR reference: - Operator: J E Churchill (Plant) Ltd Waste Management licence No: 43094 Annual Tonnage: 25000.0	Issue Date: 02/12/1991 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: J E Churchill Correspondence Address: Cleatham Road, Kirton In Lindsey, Gainsborough, Lincolnshire, DN21 4JR	





ID	Distance (m)	Direction	NGR	Details		
27B	116	NW	490135 412207	Site Address: Winterton Pit Bottom, Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU002 EPR reference: - Operator: J E Churchill (Plant) Limited Waste Management licence No: 43094 Annual Tonnage: 25000.0	Issue Date: 12/2/1991 Effective Date: - Modified: 5/28/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: J E Churchill (Plant) Limited Correspondence Address: Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH	
28B	116	NW	490135 412207	Site Address: Pit Bottom, Off Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Physical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JEC001 EPR reference: - Operator: J E Churchill Plant Ltd Waste Management licence No: 43719 Annual Tonnage: 50000.0	Issue Date: 08/09/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Pit Bottom Correspondence Address: Anston House, Ryton Road, North Anston, Sheffield, South Yorkshire, S25 4DL	
29B	116	NW	490135 412207	Site Address: Pit Bottom, Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU002 EPR reference: EA/EPR/WP3397FZ/V005 Operator: J E Churchill (Plant) Limited Waste Management licence No: 43094 Annual Tonnage: 46700.0	Issue Date: 02/12/1991 Effective Date: - Modified: 20/09/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Bell Waste Control Correspondence Address: -	
30B	116	NW	490135 412207	Site Address: Winterton Pit Bottom, Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU002 EPR reference: EA/EPR/WP3397FZ/V002 Operator: J E Churchill Plant Limited Waste Management licence No: 43094 Annual Tonnage: 25000.0	Issue Date: 02/12/1991 Effective Date: - Modified: 28/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: J E Churchill Plant Limited Correspondence Address: Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH	
31B	116	NW	490135 412207	Site Address: Winterton Pit Bottom, Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU002 EPR reference: EA/EPR/WP3397FZ/V002 Operator: J E Churchill Plant Limited Waste Management licence No: 43094 Annual Tonnage: 25000.0	Issue Date: 02/12/1991 Effective Date: - Modified: 28/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: J E Churchill Plant Limited Correspondence Address: -	
32B	116	NW	490135 412207	Site Address: Pit Bottom, Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU002 EPR reference: EA/EPR/WP3397FZ/V006 Operator: Ellgia Limited Waste Management licence No: 43094	Issue Date: 02/12/1991 Effective Date: - Modified: 10/12/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Bell Waste Control Correspondence Address: -	







ID	Distance (m)	Direction	NGR	Det	tails
				Annual Tonnage: 46700.0	
33B	116	NW	490135 412207	Site Address: Winterton Pit Bottom, Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU002 EPR reference: - Operator: J E Churchill Plant Ltd Waste Management licence No: 43094 Annual Tonnage: 25000.0	Issue Date: 02/12/1991 Effective Date: - Modified: 28/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: J E Churchill Correspondence Address: Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH
34B	116	NW	490135 412207	Site Address: Pit Bottom, Off Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Physical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JEC001 EPR reference: EA/EPR/YP3090CV/A001 Operator: J E Churchill Plant Limited Waste Management licence No: 43719 Annual Tonnage: 50000.0	Issue Date: 08/09/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Pit Bottom Correspondence Address: -
35B	116	NW	490135 412207	Site Address: Pit Bottom, Off Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Physical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JEC001 EPR reference: EA/EPR/YP3090CV/V002 Operator: Ellgia Limited Waste Management Licence No: 43719 Annual Tonnage: 50000.0	Issue Date: 08/09/2006 Effective Date: - Modified: 10/12/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Pit Bottom Correspondence Address: -
36B	118	NW	490133 412208	Site Address: Pit Bottom, Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Special Waste Transfer Station Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU003 EPR reference: EA/EPR/LP3990CY/V003 Operator: J E Churchill (Plant) Limited Waste Management licence No: 43465 Annual Tonnage: 115310.0	Issue Date: 26/05/2000 Effective Date: - Modified: 04/03/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Bell Waste Control Correspondence Address: -
37B	118	NW	490133 412208	Site Address: Pit Bottom, Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Special Waste Transfer Station Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU003 EPR reference: - Operator: J E Churchill Plant Ltd Waste Management licence No: 43465 Annual Tonnage: 70610.0	Issue Date: 26/05/2000 Effective Date: - Modified: 11/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Bell Waste Control Correspondence Address: Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH
38B	118	NW	490133 412208	Site Address: Pit Bottom, Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Special Waste Transfer Station Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU003 EPR reference: LP3990CY/V002 Operator: J E Churchill (Plant) Limited Waste Management licence No: 43465 Annual Tonnage: 70610.0	Issue Date: 26/05/2000 Effective Date: - Modified: 11/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Bell Waste Control Correspondence Address: -
39B	118	NW	490133	Site Address: Pit Bottom, Winterton Road,	Issue Date: 26/05/2000





ID	Distance (m)	Direction	NGR	Det	ails
			412208	Scunthorpe, N Lincolnshire, DN15 0DH Type: Special Waste Transfer Station Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHU003 EPR reference: EA/EPR/LP3990CY/V004 Operator: Ellgia Limited Waste Management licence No: 43465 Annual Tonnage: 115310.0	Effective Date: - Modified: 10/12/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Bell Waste Control Correspondence Address: -
40C	248	S	490407 411862	Site Address: Trent Remine, Dawes Lane, Crosby Warren, Scunthorpe, N Lincolnshire, DN15 6UW Type: Physical Treatment Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT006 EPR reference: EA/EPR/JP3090CB/A001 Operator: S I T A North Lincolnshire Ltd Waste Management licence No: 43730 Annual Tonnage: 20000.0	Issue Date: 27/04/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: S I T A North Lincolnshire Ltd Correspondence Address: -
41D	248	S	490407 411862	Site Address: Trent Remine, Dawes Lane, Crosby Warren, Scunthorpe, N Lincolnshire, DN15 6UW Type: Physical Treatment Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SUL013 EPR reference: EA/EPR/JP3090CB/S003 Operator: Suez Recycling And Recovery U K Limited Waste Management licence No: 43730 Annual Tonnage: 0.0	Issue Date: 27/04/2007 Effective Date: 14/11/2014 Modified: 30/06/2016 Surrendered Date: 04/10/2016 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Rtent Remine Inert Waste Recycling Facility Correspondence Address: -
42D	248	S	490407 411862	Site Address: Trent Remine, Dawes Lane, Crosby Warren, Scunthorpe, N Lincolnshire, DN15 6UW Type: Physical Treatment Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SUL013 EPR reference: EA/EPR/JP3090CB/A001 Operator: Sita U K Limited Waste Management licence No: 43730 Annual Tonnage: 0.0	Issue Date: 27/04/2007 Effective Date: 14/11/2014 Modified: - Surrendered Date: 0 Expiry Date: - Cancelled Date: - Status: Transferred Site Name: S I T A North Lincolnshire Ltd Correspondence Address: -
43D	248	S	490407 411862	Site Address: Trent Remine, Dawes Lane, Crosby Warren, Scunthorpe, N Lincolnshire, DN15 6UW Type: Physical Treatment Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT006 EPR reference: EA/EPR/JP3090CB/A001 Operator: S I T A North Lincolnshire Ltd Waste Management licence No: 43730 Annual Tonnage: 20000.0	Issue Date: 27/04/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: S I T A North Lincolnshire Ltd Correspondence Address: -
44D	248	S	490407 411862	Site Address: Trent Remine, Dawes Lane, Crosby Warren, Scunthorpe, N Lincolnshire, DN15 6UW Type: Physical Treatment Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SUL013 EPR reference: EA/EPR/JP3090CB/S003 Operator: Suez Recycling And Recovery U K Ltd Waste Management licence No: 43730 Annual Tonnage: 0.0	Issue Date: 27/04/2007 Effective Date: 14/11/2014 Modified: 30/06/2016 Surrendered Date: Oct 4 2016 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Rtent Remine Inert Waste Recycling Facility Correspondence Address: -



LOCATION INTELLIGENCE



ID	Distance (m)	Direction	NGR	Details		
45E	255	SW	490018 412005	Site Address: Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: THO184 EPR reference: EA/EPR/KB3236AX/T001 Operator: Thompson Waste Management Ltd Waste Management licence No: 43091 Annual Tonnage: 74999.0	Issue Date: 27/04/1994 Effective Date: 06/12/2012 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: Thompson Yard Correspondence Address: -	
46E	255	SW	490018 412005	Site Address: Land/premises At, Winterton Road, Scunthorpe, N Lincolnshire, DN15 0DH Type: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: KDT001 EPR reference: EA/EPR/VP3697FA/A001 Operator: Kevin & David Thompson Waste Management licence No: 43091 Annual Tonnage: 25000.0	Issue Date: 27/04/1994 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: K & D Thompson Metals Correspondence Address: -	
47F	330	SW	489954 411967	Site Address: The Old Waterworks, Winterton Road, Scunthorpe, N Lincolnshire, DN15 0BA Type: Vehicle Depollution Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MJS001 EPR reference: EA/EPR/EB3701MT/V002 Operator: M J S Recovery (Scunthorpe) Limited Waste Management licence No: 403699 Annual Tonnage: 0.0	Issue Date: 06/03/2017 Effective Date: - Modified: 01/02/2018 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: M J S Recovery Correspondence Address: -	
48F	330	SW	489954 411967	Site Address: The Old Waterworks, Winterton Road, Scunthorpe, N Lincolnshire, DN15 0BA Type: Vehicle Depollution Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MJS001 EPR reference: EA/EPR/EB3701MT/V002 Operator: M J S Recovery (Scunthorpe) Limited Waste Management licence No: 403699 Annual Tonnage: 0.0	Issue Date: 06/03/2017 Effective Date: - Modified: 01/02/2018 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: M J S Recovery Correspondence Address: -	
49	347	SW	489973 411913	Site Address: Land/premises At, Winterton Road, Scunthorpe, N Lincolnshire, DN15 OBA Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHE001 EPR reference: EA/EPR/RP3597FC/S002 Operator: Checkbuild Ltd Waste Management licence No: 43119 Annual Tonnage: 0.0	Issue Date: 28/04/1994 Effective Date: - Modified: - Surrendered Date: Apr 18 2011 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Checkbuild Ltd Correspondence Address: -	
50	405	S	490400 411700	Site Address: Trent Remine, Dawes Lane, Crosby Warren, Scunthorpe, North Lincs, DN15 6UW Type: - Size: < 25000 tonnes Environmental Permitting Regulations	Issue Date: 27/04/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: -	

Groundsure LOCATION INTELLIGENCE



ID	Distance (m)	Direction	NGR	Details		
				(Waste) Licence Number: SIT006 EPR reference: - Operator: Sita North Lincolnshire Ltd Waste Management licence No: 43730 Annual Tonnage: 0.0	Status: Issued Site Name: - Correspondence Address: Ltcp, Stather Road, Flixborough, Nr Scunthorpe, North Lincs, DN15 8SN	
51G	423	SW	489948 411830	Site Address: Winterton Road, Scunthorpe, N Lincolnshire, DN15 Type: Landfill taking Non-Biodegradeable Wastes Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HOR001 EPR reference: EA/EPR/WP3897FQ/A001 Operator: Hornsby & Goodwyn Ltd Waste Management licence No: 43098 Annual Tonnage: 150000.0	Issue Date: 24/05/1977 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: Hornsby & Goodwin Ltd Correspondence Address: -	
52G	424	SW	489948 411829	Site Address: Winterton Road, Scunthorpe, North Lincs, DN15 Type: Landfill taking Non-Biodegradeable Wastes Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HOR001 EPR reference: - Operator: Hornsby & Goodwyn Ltd Waste Management licence No: 43098 Annual Tonnage: 0.0	Issue Date: 24/05/1977 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Hornsby & Goodwin Ltd Correspondence Address: Founders House, 25, Church Street, Elsham, Brigg, North Lincs, DN20 0RG	
53	540	W	489723 412319	Site Address: Bessemer Way, Scunthorpe, N Lincolnshire, DN15 6XH Type: Use of waste in construction <50,000 tps Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: THO178 EPR reference: EA/EPR/EB3133AV/A001 Operator: Thompson Waste Management Ltd Waste Management licence No: 103734 Annual Tonnage: 49999.0	Issue Date: 16/02/2012 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: Plot 1 Correspondence Address: -	
Not shown	560	S	490326 411540	Site Address: Dawes Lane, Scunthorpe, North Lincs, DN15 6UR Type: Industrial Waste Landfill (Factory curtilage) Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BIT001 EPR reference: - Operator: Koppers U K Limited Waste Management licence No: 43125 Annual Tonnage: 5000.0	Issue Date: 02/05/1977 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure Site Name: Scunthorpe Works Correspondence Address: Dawes Lane, Scunthorpe, North Lincs, DN15 6UR	
55	571	NW	489706 412363	Site Address: Bessemer Way Landfill, Bessemer Way, Scunthorpe, N Lincolnshir Type: Landfill taking Non-Biodegradeable Wastes Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ONW001 EPR reference: EA/EPR/YP3697FY/S003 Operator: Onward Holdings Ltd Waste Management licence No: 43147 Annual Tonnage: 0.0	Issue Date: 23/09/1997 Effective Date: 23/08/2000 Modified: - Surrendered Date: Dec 21 2015 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Bessemer Way Landfill Correspondence Address: -	
Not shown	574	S	490244 411534	Site Address: Dawes Lane, Scunthorpe, N Lincolnshire, DN15 6UR Type: Industrial Waste Landfill (Factory curtilage)	Issue Date: 02/05/1977 Effective Date: 02/07/2016 Modified: - Surrendered Date: -	





ID	Distance (m)	Direction	NGR	De	tails
				Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ICL001 EPR reference: EA/EPR/EB3106XA/T001 Operator: Industrial Chemicals Limited Waste Management licence No: 43125 Annual Tonnage: 5000.0	Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Scunthorpe Tar Distillery Correspondence Address: -
Not shown	574	S	490244 411534	Site Address: Dawes Lane, Scunthorpe, N Lincolnshire, DN15 6UR Type: Industrial Waste Landfill (Factory curtilage) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BIT001 EPR reference: - Operator: Koppers U K Ltd Waste Management licence No: 43125 Annual Tonnage: 5000.0	Issue Date: 02/05/1977 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure Site Name: Scunthorpe Works Correspondence Address: Dawes Lane, Scunthorpe, N Lincolnshire, DN15 6UR
Not shown	574	S	490244 411534	Site Address: Dawes Lane, Scunthorpe, N Lincolnshire, DN15 6UR Type: Industrial Waste Landfill (Factory curtilage) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BIT001 EPR reference: EA/EPR/RP3797FV/A001 Operator: Koppers U K Limited Waste Management licence No: 43125 Annual Tonnage: 5000.0	Issue Date: 02/05/1977 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure Site Name: Scunthorpe Works Correspondence Address: -
59H	575	E	490920 412120	Site Address: Crosby Warren Landfill, Po Box 1, Brigg Road, Scunthorpe, N Lincolnshire, DN16 1BP Type: Industrial Waste Landfill (Factory curtilage) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR002 EPR reference: - Operator: Corus U K Ltd Waste Management licence No: 43097 Annual Tonnage: 435300.0	Issue Date: 26/09/1978 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Crosby Warren Landfill Correspondence Address: Scunthorpe Works, P O Box 1, Brigg Road, Scunthorpe, N Lincolnshire, DN16 1BP
60H	575	E	490920 412120	Site Address: Crosby Warren Landfill, Dawes Lane, Scunthorpe, North Lincs Type: Co-Disposal Landfill Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR002 EPR reference: - Operator: Corus Waste Management licence No: 43097 Annual Tonnage: 0.0	Issue Date: 26/09/1978 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Crosby Warren Landfill Correspondence Address: Scunthorpe Works, P O Box 1, Brigg Road, Scunthorpe, North Lincs, DN16 1BP
61H	575	E	490920 412120	Site Address: Crosby Warren Landfill, Po Box 1, Brigg Road, Scunthorpe, North Lincs, DN16 1BP Type: Co-Disposal Landfill Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR002 EPR reference: - Operator: Corus Uk Ltd Waste Management licence No: 43097 Annual Tonnage: 0.0	Issue Date: 26/09/1978 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Crosby Warren Landfill Correspondence Address: Scunthorpe Works, P O Box 1, Brigg Road, Scunthorpe, North Lincs, DN16 1BP
Not shown	682	S	490151 411444	Site Address: 26, High Street East, Scunthorpe, North Lincs, DN15 6UH	Issue Date: 29/06/1995 Effective Date: -





ID	Distance (m)	Direction	NGR	Details			
				Type: Metal Recycling Site (Vehicle Dismantler) Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: CHE002 EPR reference: - Operator: Checkbuild Ltd Waste Management licence No: 43099 Annual Tonnage: 5000.0	Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Checkbuild Ltd Correspondence Address: Winterton Road, Scunthorpe, North Lincs, DN15 0BA		
Not shown	699	S	490169 411422	Site Address: 26, High Street East, Scunthorpe, N Lincolnshire, DN15 6UH Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHE002 EPR reference: EA/EPR/WP3497FE/S002 Operator: Checkbuild Ltd Waste Management licence No: 43099 Annual Tonnage: 0.0	Issue Date: 29/06/1995 Effective Date: - Modified: - Surrendered Date: Apr 4 2011 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Checkbuild Ltd Correspondence Address: -		
Not shown	701	E	491041 412238	Site Address: Crosby Warren Landfill, P O Box 1, Brigg Road, Scunthorpe, N Lincolnshire, DN16 1BP Type: Industrial Waste Landfill (Factory curtilage) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR002 EPR reference: EA/EPR/WP3597FW/A001 Operator: Corus U K Ltd Waste Management licence No: 43097 Annual Tonnage: 435300.0	Issue Date: 26/09/1978 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Crosby Warren Landfill Correspondence Address: -		
Not shown	701	E	491041 412238	Site Address: Crosby Warren Landfill, P O Box 1, Brigg Road, Scunthorpe, N Lincolnshire, DN16 1BP Type: Industrial Waste Landfill (Factory curtilage) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TAT009 EPR reference: EA/EPR/DB3103KJ/V002 Operator: British Steel Limited Waste Management licence No: 43097 Annual Tonnage: 435300.0	Issue Date: 26/09/1978 Effective Date: 01/08/2015 Modified: 05/09/2016 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Crosby Warren Landfill Correspondence Address: -		
Not shown	701	E	491041 412238	Site Address: Crosby Warren Landfill, P O Box 1, Brigg Road, Scunthorpe, N Lincolnshire, DN16 1BP Type: Industrial Waste Landfill (Factory curtilage) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR002 EPR reference: - Operator: Corus U K Limited Waste Management licence No: 43097 Annual Tonnage: 435300.0	Issue Date: 9/26/1978 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Crosby Warren Landfill Correspondence Address: Scunthorpe Works, P O Box 1, Brigg Road, Scunthorpe, N Lincolnshire, DN16 1BP		
Not shown	701	E	491041 412238	Site Address: Crosby Warren Landfill, P O Box 1, Brigg Road, Scunthorpe, N Lincolnshire, DN16 1BP Type: Industrial Waste Landfill (Factory curtilage) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TAT009 EPR reference: EA/EPR/DB3103KJ/T001 Operator: Longs Steel U K Limited	Issue Date: 26/09/1978 Effective Date: 01/08/2015 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Crosby Warren Landfill Correspondence Address: -		



LOCATION INTELLIGENCE



ID	Distance (m)	Direction	NGR	Det	ails
				Waste Management licence No: 43097 Annual Tonnage: 435300.0	
Not shown	718	E	491059 412233	Site Address: Crosby Warren, Off Dawes Lane, Scunthorpe, N Lincolnshire, DN15 6UW Type: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT004 EPR reference: EA/EPR/CP3390CP/V004 Operator: Suez Recycling And Recovery U K Ltd Waste Management licence No: 43584 Annual Tonnage: 25000.0	Issue Date: 17/06/2004 Effective Date: - Modified: 30/06/2016 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: New Crosby Waste Management Facility Correspondence Address: -
Not shown	718	E	491059 412233	Site Address: Crosby Warren, Off Dawes Lane, Scunthorpe, N Lincolnshire, DN15 6UW Type: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT004 EPR reference: EA/EPR/CP3390CP/V003 Operator: Sita U K Ltd Waste Management licence No: 43584 Annual Tonnage: 25000.0	Issue Date: 17/06/2004 Effective Date: - Modified: 16/04/2014 Surrendered Date: 0 Expiry Date: - Cancelled Date: - Status: Modified Site Name: New Crosby Waste Management Facility Correspondence Address: -
Not shown	718	E	491059 412233	Site Address: Crosby Warren, Off Dawes Lane, Scunthorpe, N Lincolnshire, DN15 6UW Type: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT004 EPR reference: EA/EPR/CP3390CP/V003 Operator: S I T A U K Ltd Waste Management licence No: 43584 Annual Tonnage: 25000.0	Issue Date: 17/06/2004 Effective Date: - Modified: 16/04/2014 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: New Crosby Waste Management Facility Correspondence Address: -
Not shown	723	S	490202 411390	Site Address: 10, High Street East, Scunthorpe, N Lincolnshire, DN15 6UH Type: Metal Recycling Site (mixed MRS's) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EVA001 EPR reference: EA/EPR/WP3197FT/A001 Operator: Eva George Webster Waste Management licence No: 43103 Annual Tonnage: 5000.0	Issue Date: 30/06/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: George Eva Webster Vehicle Dismantler Correspondence Address: -
Not shown	752	W	489481 412132	Site Address: Glebe Road, Scunthorpe, North Lincs Type: Landfill taking Non-Biodegradeable Wastes Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ONW002 EPR reference: - Operator: Onward Holdings Ltd Waste Management licence No: 43124 Annual Tonnage: 0.0	Issue Date: 08/12/1978 Effective Date: 23/08/2000 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure Site Name: Glebe Pit Correspondence Address: Road 4, Sth Humberside Ind Est, Grimsby, N E Lincs, DN21 2TB
Not shown	752	W	489481 412132	Site Address: Glebe Pit, Glebe Road, Scunthorpe, N Lincolnshir Type: Landfill taking Non-Biodegradeable Wastes Size: < 25000 tonnes	Issue Date: 08/12/1978 Effective Date: 23/08/2000 Modified: - Surrendered Date: Jan 10 2008 12:00AM Expiry Date: -





ID	Distance (m)	ce Direction	Pirection NGR	Details		
				Environmental Permitting Regulations (Waste) Licence Number: ONW002 EPR reference: EA/EPR/RP3197FM/S003 Operator: Onward Holdings Ltd Waste Management licence No: 43124 Annual Tonnage: 0.0	Cancelled Date: - Status: Surrendered Site Name: Glebe Pit Correspondence Address: -	
Not shown	831	W	489405 412209	Site Address: Bessemer Way, Scunthorpe, N Lincolnshir Type: Landfill taking Non-Biodegradeable Wastes Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EAS005 EPR reference: EA/EPR/VP3297FH/S002 Operator: East Lincolnshire Properties Ltd Waste Management licence No: 43089 Annual Tonnage: 30645.0	Issue Date: 24/07/1996 Effective Date: - Modified: - Surrendered Date: Jun 22 2000 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Bessemer Way Landfill Correspondence Address: -	
Not shown	918	Ν	490032 413069	Site Address: Land/premises At, Mannaberg Way, Scunthorpe, N Lincolnshire, DN15 8XF Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MAR013 EPR reference: EA/EPR/JP3890CW/A001 Operator: Martin James Anthony Waste Management licence No: 43734 Annual Tonnage: 2110.0	Issue Date: 10/10/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Former Normanby Industries Premises Correspondence Address: -	
Not shown	951	NW	489472 412726	Site Address: Former Normanby Industries Premises, Wybeck Road, Mannaberg Way, Scunthorpe, N Lincolnshire, DN15 8XF Type: Metal Recycling Site (Vehicle Dismantler) Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JSJ003 EPR reference: EA/EPR/KB3534AK/T001 Operator: J S J Metal Recycling Limited Waste Management licence No: 43734 Annual Tonnage: 80000.0	Issue Date: 10/10/2007 Effective Date: 10/10/2012 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Former Normanby Industries Premises Correspondence Address: -	
Not shown	951	NW	489472 412726	Site Address: Former Normanby Industries Premises, Wybeck Road, Mannaberg Way, Scunthorpe, N Lincolnshire, DN15 8XF Type: Metal Recycling Site (Vehicle Dismantler) Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: AAR002 EPR reference: EA/EPR/FB3804KV/T001 Operator: Aaraav Metal Recycling Waste Management licence No: 43734 Annual Tonnage: 80000.0	Issue Date: 10/10/2007 Effective Date: 17/05/2018 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Former Normanby Industries Premises Correspondence Address: -	
Not shown	1057	NW	489480 412904	Site Address: Pps Metal Recycling, Wybeck Road, Mannaberg Way, Scunthorpe, N Lincolnshire, DN15 8XF Type: Metal Recycling Site (Vehicle Dismantler) Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: AAR002 EPR reference: EA/EPR/FB3804KV/T001 Operator: Aaraav Metal Recycling Limited Waste Management licence No: 43734 Annual Tonnage: 80000.0	Issue Date: 10/10/2007 Effective Date: 17/05/2018 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Pps Metal Recycling Correspondence Address: -	



Brownfield Consulting & Development

ID	Distance (m)	Direction	NGR	Det	ails
Not shown	1111	E	491400 412500	Site Address: Crosby Warren, Off Dawes Lane, Scunthorpe, N Lincolnshire Type: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT004 EPR reference: - Operator: Sita (UK) Ltd Waste Management licence No: 43584 Annual Tonnage: 25000.0	Issue Date: 17/06/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: New Crosby Waste Management Facility Correspondence Address: Bold Business Centre, Bold Lane, Sutton, St Helens, Merseyside, WA9 4TX
Not shown	1111	E	491400 412500	Site Address: Crosby Warren, Off Dawes Lane, Scunthorpe, Nth Lincolnshir Type: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT004 EPR reference: - Operator: Sita (U K) Limited Waste Management licence No: 43584 Annual Tonnage: 0.0	Issue Date: 17/06/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: New Crosby Waste Management Facility Correspondence Address: Bold Business Centre, Bold Lane, Sutton, St Helens, Merseyside, WA9 4TX
Not shown	1417	S	490545 410698	Site Address: Cottage Beck Transfer Station, Cottage Beck Road, Scunthorpe, N Lincolnshire, DN16 1TS Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: NOR001 EPR reference: EA/EPR/DP3097FC/V003 Operator: North Lincolnshire Council Waste Management licence No: 43128 Annual Tonnage: 24999.0	Issue Date: 22/01/1992 Effective Date: - Modified: 22/11/2012 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Cottage Beck Transfer Station Correspondence Address: -
Not shown	1422	S	490591 410701	Site Address: Civic Amenity Site, Cottage Beck Road, Scunthorpe, N Lincolnshire, DN16 1TS Type: Special Waste Transfer Station Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT001 EPR reference: EA/EPR/RP3297FX/V003 Operator: S I T A North Lincolnshire Ltd Waste Management licence No: 43122 Annual Tonnage: 50000.0	Issue Date: 07/12/1992 Effective Date: 06/12/1999 Modified: 11/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Cottage Beck Civic Amenity Correspondence Address: -
Not shown	1422	S	490591 410701	Site Address: Cottage Beck Civic Amenity Site, Cottage Beck Road, Scunthorpe, N Lincolnshire, DN16 1TS Type: Household Waste Amenity Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: NOR436 EPR reference: EA/EPR/KB3737RF/T001 Operator: North Lincolnshire Borough Council Waste Management licence No: 43122 Annual Tonnage: 50000.0	Issue Date: 07/12/1992 Effective Date: 04/10/2012 Modified: 11/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Cottage Beck Civic Amenity Correspondence Address: -
Not shown	1460	S	490811 410719	Site Address: Yarborough Landfill Site, P O Box 1, Brigg Road, Scunthorpe, N Lincolnshire, DN16 1BP Type: Industrial Waste Landfill (Factory curtilage) Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR003	Issue Date: 5/10/1978 Effective Date: - Modified: 8/5/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Yarborough Landfill Site





ID	Distance (m)	Direction	NGR	Det	tails
				EPR reference: - Operator: Corus U K Limited Waste Management licence No: 43126 Annual Tonnage: 637500.0	Correspondence Address: Scunthorpe Works, P O Box 1, Brigg Road, Scunthorpe, N Lincolnshire, DN16 1BP
Not shown	1460	S	490811 410719	Site Address: Yarborough Landfill Site, P O Box 1, Brigg Road, Scunthorpe, N Lincolnshire, DN16 1BP Type: Industrial Waste Landfill (Factory curtilage) Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COR003 EPR reference: EA/EPR/DP3397FA/V003 Operator: Corus U K Ltd Waste Management licence No: 43126 Annual Tonnage: 637500.0	Issue Date: 10/05/1978 Effective Date: - Modified: 05/08/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC Site Name: Yarborough Landfill Site Correspondence Address: -





4. Current Land Use Map







4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

12

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Directio n	Company	NGR	Address	Activity	Category
1	13	S	A C Autos	490292 412105	Winterton Road, Scunthorpe, Lincolnshire, DN15 0DH	Scrap Metal Merchants	Recycling Services
2	76	NW	ELLGIA	490213 412245	Pit Bottom, Winterton Road, Scunthorpe, Lincolnshire, DN15 0DH	Waste Storage, Processing and Disposal	Infrastructure and Facilities
3	143	E	Refuse Tip	490487 412112	Lincolnshire, DN16	Refuse Disposal Facilities	Infrastructure and Facilities
4A	157	W	BOC	490076 412151	Warren Road, Scunthorpe, Lincolnshire, DN15 6XH	Medical Equipment, Supplies and Pharmaceuticals	Industrial Products
5A	158	W	Nationwide Crash Repair Centres Ltd	490075 412151	Winterton Road, Scunthorpe, Lincolnshire, DN15 0BA	Vehicle Repair, Testing and Servicing	Repair and Servicing
6	161	NW	Tank	490098 412236	Lincolnshire, DN15	Tanks (Generic)	Industrial Features
7	173	S	Pumping House	490320 411928	Lincolnshire, DN16	Water Pumping Stations	Industrial Features
8	192	W	Electricity Sub Station	490045 412184	Lincolnshire, DN15	Electrical Features	Infrastructure and Facilities
9	204	SE	Refuse Tip	490463 411938	Lincolnshire, DN16	Refuse Disposal Facilities	Infrastructure and Facilities
10	217	NW	Tank	490140 412365	Lincolnshire, DN15	Tanks (Generic)	Industrial Features
11	231	NW	Tank	490146 412385	Lincolnshire, DN15	Tanks (Generic)	Industrial Features
12	248	NW	Tank	490075 412355	Lincolnshire, DN15	Tanks (Generic)	Industrial Features

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site:

0

Database searched and no data found.





4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site:

Database searched and no data found.

0

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site:

0

Database searched and no data found.







5.1 Artificial Ground and Made Ground

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT

5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
SUTN-S	SUTTON SAND FORMATION	SAND
BSA-S	BLOWN SAND	SAND

5.3 Bedrock and Solid Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
FI-FEST	FRODINGHAM IRONSTONE MEMBER	IRONSTONE
FI-FEST	FRODINGHAM IRONSTONE MEMBER	IRONSTONE

(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)





6 Hydrogeology and Hydrology 6a. Aquifer Within Superficial Geology







6b. Aquifer Within Bedrock Geology and Abstraction Licences







6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



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6d. Hydrogeology – Source Protection Zones within confined aquifer









6e. Hydrology – Watercourse Network and River Quality







6.Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distanc e (m)	Direction	Designation	Description
1	0	On Site	Secondary A	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
2	85	NW	Secondary A	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
3	234	W	Secondary A	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
4	259	SW	Secondary A	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
5	285	S	Secondary A	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

6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distanc e (m)	Direction	Designation	Description
1	0	On Site	Secondary A	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
2	233	W	Secondary A	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





Groundwater Abstraction Licences within 2000m of the study site

Identified

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	R Details	
Not show n	1199	E	491500 411800	Status: Historical Licence No: 03/28/81/0001 Details: Non-Evaporative Cooling Direct Source: Groundwater Midlands Region Point: EPOK WORKS,SCUNTHORPE - DISUSED IRONSTONE WORKINGS (2) Data Type: Point Name: BRADKEN UK LIMITED	Annual Volume (m ³): 247,302 Max Daily Volume (m ³): 982 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 20/12/2006 Version End Date:
Not show n	1199	E	491500 411800	Status: Historical Licence No: 03/28/81/0001 Details: Process Water Direct Source: Groundwater Midlands Region Point: EPOK WORKS,SCUNTHORPE - DISUSED IRONSTONE WORKINGS (2) Data Type: Point Name: BRADKEN UK LIMITED	Annual Volume (m ³): 247,302 Max Daily Volume (m ³): 982 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 20/12/2006 Version End Date:
Not show n	1419	E	491700 411700	Status: Historical Licence No: 03/28/81/0001 Details: Non-Evaporative Cooling Direct Source: Groundwater Midlands Region Point: EPOK WORKS,SCUNTHORPE - DISUSED IRONSTONE WORKINGS (1) Data Type: Point Name: BRADKEN UK LIMITED	Annual Volume (m ³): 247,302 Max Daily Volume (m ³): 982 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 20/12/2006 Version End Date:
Not show n	1419	E	491700 411700	Status: Historical Licence No: 03/28/81/0001 Details: Process Water Direct Source: Groundwater Midlands Region Point: EPOK WORKS,SCUNTHORPE - DISUSED IRONSTONE WORKINGS (1) Data Type: Point Name: BRADKEN UK LIMITED	Annual Volume (m ³): 247,302 Max Daily Volume (m ³): 982 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 20/12/2006 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

None identified

Database searched and no data found.

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

Database searched and no data found.

None identified





None identified

Source Protection Zones within 500m of the study site

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site None identified

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
233	W	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.

6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site None identified

6.9.1 Biological Quality:

Database searched and no data found.





Database searched and no data found.

6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	99 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
1	99 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
2	150 S	-	Lake, loch or reservoir.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
2	150 S	-	Lake, loch or reservoir.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
3	183 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
3	183 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	211 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.3
4	211 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal





ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				conditions) Average Width in Watercourse Section (m): 2.3
5	- 352 NE		Lake, loch or reservoir.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 19.7
Not shown	- 352 NE		Lake, loch or reservoir.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 19.7
6	- 487 NW		Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	- 487 NW		Inland river not influenced by normal tidal action.	Catchment Area: Trent Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

6.11 Surface Water Features

Surface water features within 250m of the study site

Identified

The following surface water records are not represented on mapping:

Distance (m)	Direction
1	E
36	NE
99	W
122	S
130	S
183	S
200	NE





7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)







7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map







7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m

None identified

Environment Agency/Natural Resources Wales Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m None identified

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

Database searched and no data found.

7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

Highest risk of flooding onsite

The Environment Agency/Natural Resources Wales RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a Very Low (less than 1 in 1000) chance of flooding in any given year.

7.4 Flood Defences

Flood Defences within 250m of the study site Database searched and no data found. None identified

Very Low

7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site

None identified





None identified

Clearwater Flooding

Areas used for Flood Storage within 250m of the study site

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site Identified

Clearwater Flooding or Superficial Deposits Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Limited potential Where limited potential for groundwater flooding to occur is indicated, this means that although given the geological conditions there may be a groundwater flooding hazard, unless other relevant information, e.g. records of previous flooding, suggests groundwater flooding has occurred before in this area, you need take no further action in relation to groundwater flooding hazard.

7.8 Groundwater Flooding Confidence Areas

British Geological Survey confidence rating in this result

Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

Report Reference: CMAPS-GDP-822989-33420-220819 Client Reference: 33420 Low





8. Designated Environmentally Sensitive Sites Map






8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site

Identified

1

0

0

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

The following Site of Special Scientific Interest (SSSI) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SSSI Name	Data Source
Not shown	1619	NE	Risby Warren	Natural England

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

Database searched and no data found.

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

Database searched and no data found.

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

Database searched and no data found.

8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

8.6 Records of Ancient Woodland within 2000m of the study site:

Grou

LOCATION INTELLIGENCE

Database searched and no data found.

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

The following Local Nature Reserve (LNR) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	LNR Name	Data Source
2	910	Ν	Sawcliffe	Natural England
Not shown	1750	W	Atkinson's Warren	Natural England

8.8 Records of World Heritage Sites within 2000m of the study site:

Database searched and no data found.

8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

Database searched and no data found.

8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

Database searched and no data found.

8.11 Records of National Parks (NP) within 2000m of the study site:

Database searched and no data found.

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2

0

0



70



0





8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

7

The following Nitrate Vulnerable Zone records produced by DEFRA are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	NVZ Name	Data Source
4	0	On Site	Existing	DEFRA
5	233	W	Existing	DEFRA
Not shown	1529	Ν	Existing	DEFRA
Not shown	1533	W	Existing	DEFRA
Not shown	1619	NE	Existing	DEFRA
Not shown	1832	Ν	Existing	DEFRA
Not shown	1835	Ν	Existing	DEFRA

8.14 Records of Green Belt land within 2000m of the study site:

Database searched and no data found.



This indicates an automatically generated 50m buffer and site.

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a Groundsure Geo Insight, available from our website. The following information has been found:

9.1.1 Shrink Swell

Maximum Shrink-Swell** hazard rating identified on the study site

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Ground conditions predominantly non-plastic. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely likely due to potential problems with shrink-swell clays.

Hazard

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

9.1.3 Soluble Rocks

Maximum Soluble Rocks* hazard rating identified on the study site

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.



72



Negligible

Very Low

Negligible





Maximum Compressible Ground* hazard rating identified on the study site

Moderate

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Significant potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.

Hazard

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

9.1.6 Running Sand

Maximum Running Sand** hazard rating identified on the study site

The following natural subsidence information	provided by the British	Geological Survey is not represented
on mapping:		

Hazard

Possibility of running sand problems after major changes in ground conditions. Normal maintenance to avoid leakage of water-bearing services or water bodies (ponds, swimming pools) should reduce likelihood of problems due to running sand. For new build consider possibility of running sand into trenches or excavations if water table is high or sandy strata are exposed to water. Avoid concentrated water inputs to site. Unlikely to be an increase in construction costs due to potential for running sand. For existing property no significant increase in insurance risk due to running sand problems is likely.

Very Low

Low

^{*} This indicates an automatically generated 50m buffer and site.





9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is in a Radon Affected Area, as between 3 and 5% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing

ones as described in publication BR211 by the Building Research Establishment? Basic radon protective measures are necessary.





10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

Database searched and no data found.

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary

Database searched and no data found.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site Guidance: No Guidance Required.

None identified

None identified

None identified





Contact Details

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> The Coal Authority 200 Lichfield Lane Mansfield Notts NG18 4RG Tel: 0345 7626 848 DX 716176 Mansfield 5 www.coal.gov.uk

Ordnance Survey Adanac Drive, Southampton SO16 0AS Tel: 08456 050505 Environment Agency



The Coal Authority



Local Authority Authority: North Lincolnshire Council Phone: 01724 297 000 Web: http://www.northlincs.gov.uk/ Address: Church Square House, 30-40 High Street, Scunthorpe, North

> Gemapping PLC Virginia Villas, High Street, Hartley Witney, Hampshire RG27 8NW Tel: 01252 845444







Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England/Natural Resources Wales who retain the Copyright and Intellectual Property Rights for the data.

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https://www.groundsure.com/terms-and-conditions-feb11-2019



Address: Date: **Reference:** Client:

Bell Waste Site, Winterton Road, Scunthorpe,

2 Nov 2016

EmapSite

EMS-390782_522944

Ν

NE



SW

Aerial Photograph Capture date: 07-Jun-2013 Grid Reference: 490254,412277 Site Size: 0.20ha

SE





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Continue 1. Conlogue



Overview of Findings

The Groundsure Geo Insight provides high quality geo-environmental information that allows geoenvironmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Shallow Mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and Groundsure's unique database including historical surface ground and underground workings.

For further details on each dataset, please refer to each individual section in the report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section TiGeology								
1.1 Artificial Ground	1.1.1 Is there any Artificial Ground/ Made beneath the study site?	Ground pres	ent	Yes				
1.1.2 Are there any records relating to permeability of artificial ground within the study site* boundary?								
1.2 Superficial Geology and	1.2.1 Is there any Superficial Ground/Drift beneath the study site?	t Geology pre	esent	Yes				
Landsups	1.2.2 Are there any records relating to pe superficial geology within the study site b	rmeability of ooundary?		Yes				
	1.2.3 Are there any records of landslip wit site boundary?	thin 500m of	the study	No				
	1.2.4 Are there any records relating to pe within the study site boundary?	No						
1.3 Bedrock, Solid1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.								
	1.3.2 Are there any records relating to pe within the study site boundary?	Yes						
	1.3.3 Are there any records of faults within 500m of the study site boundary?				No			
1.4 Radon data	1.4.1 Is the property in a Radon Affected . Health Protection Agency (HPA) and if so homes are above the Action Level?	Area as defin what percer	ed by the ntage of	The property is in a Radon Affected Area, as between 3 and 5% of properties are above the Action Level				
	1.4.2 Is the property in an area where Rac Measures are required for new properties existing ones as described in publication E Research Establishment?	lon Protectio or extension 3R211 by the	n Is to Building	Basic radon p necessary	rotective mea	sures are		
Section 2:Ground	Workings	On-site	0-50m	51-250	251-500	501-1000		
2.1 Historical Surface Ground Working Features from Small Scale Mapping		0	2	14	Not Searched	Not Searched		
2.2 Historical Undergr	ound Workings from Small Scale Mapping	0	0	0	0	2		
2.3 Current Ground W	0	0	2	1	6			





Section 3:Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
3.1 Historical Mining	0	0	0	0	2
3.2 Coal Mining	0	0	0	0	0
3.3 Johnson Poole and Bloomer Mining Area	1	0	2	1	4
3.4 Non-Coal Mining	0	0	1	0	0
3.5 Non-Coal Mining Cavities	0	0	0	0	0
3.6 Natural Cavities	0	0	0	0	0
3.7 Brine Extraction	0	0	0	0	0
3.8 Gypsum Extraction	0	0	0	0	0
3.9 Tin Mining	0	0	0	0	0
3.10 Clay Mining	0	0	0	0	0
Section 4:Natural Ground Subsidence	On-si	te			
4.1 Shrink Swell Clay	Negligi	ible			
4.2 Landslides	Very L	OW			
4.3 Ground Dissolution of Soluble Rocks	Negligi	ible			
4.4 Compressible Deposits	Moder	ate			
4.5 Collapsible Deposits	Very L	OW			
4.6 Running Sand	Low	1			
Section 5:Borehole Records	On-site	0-50m	51-250		
5 BGS Recorded Boreholes	0	0	0		
Section 6:Estimated Background Soil Chemistry	On-site	0-50m	51-250		
6 Records of Background Soil Chemistry	1	1	25		
Section 7:Railways and Tunnels	On-site	0-50m	51-250	251-500	
7.1 Tunnels	0	0	0	Not Searched	
7.2 Historical Railway and Tunnel Features	1	6	19	Not Searched	
7.3 Historical Railways	0	2	3	Not Searched	
7.4 Active Railways	0	0	2	Not Searched	





Section 7:Railways and Tunnels	On-site	0-50m	51-250	251-500
7.5 Railway Projects	0	0	0	0





1 Geology 1.1 Artificial Ground Map





Yes



1 Geology 1.1 Artificial Ground

1.1.1Artificial/ Made Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:080

Are there any records of Artificial/Made Ground within 500m of the study site boundary?

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	WMGR-MGRD	INFILLED GROUND	ARTIFICIAL DEPOSIT
2	53.0	W	WMGR-MGRD	INFILLED GROUND	ARTIFICIAL DEPOSIT
3	56.0	S	WMGR-MGRD	INFILLED GROUND	ARTIFICIAL DEPOSIT
4	173.0	E	WMGR-MGRD	INFILLED GROUND	ARTIFICIAL DEPOSIT
5	175.0	SE	WMGR-MGRD	INFILLED GROUND	ARTIFICIAL DEPOSIT
6	211.0	SW	WMGR-MGRD	INFILLED GROUND	ARTIFICIAL DEPOSIT

1.1.2 Permeability of Artificial Ground

Are there any records relating to permeability of artificial ground within the study site boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	Very High	Low





1.2 Superficial Deposits and Landslips Map









Search Buffers (m)





1.2 Superficial Deposits and Landslips

1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	13.0	NW	BSA1	BLOWN SAND, 1	SAND [UNLITHIFIED DEPOSITS CODING SCHEME]
2	91.0	SE	BSA1	BLOWN SAND, 1	SAND [UNLITHIFIED DEPOSITS CODING SCHEME]
3	92.0	SE	SUTN	SUTTON SAND FORMATION	SAND [UNLITHIFIED DEPOSITS CODING SCHEME]
4	448.0	S	SUTN	SUTTON SAND FORMATION	SAND [UNLITHIFIED DEPOSITS CODING SCHEME]

1.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
13.0	NW	Intergranular	High	High

1.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary?

No

Database searched and no data found.

This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.





1.2.4 Landslip Permeability

Are there any records relating to permeability of landslips within the study site** boundary? No

Database searched and no data found.

^{*} This includes an automatically generated 50m buffer zone around the site





1.3 Bedrock and Faults Map



SW

Bedrock and Faults Legend

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SE



Site Outline

1000

Search Buffers (m)



Groundsure



1.3 Bedrock, Solid Geology & Faults

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:080

1.3.1 Bedrock/ Solid Geology

Records of Bedrock/ Solid Geology within 500m of the study site boundary:

	ID	Distance (m)	Direction	LEX Code	Description Rock Age	
	1	0.0	On Site	FI-FEST	Frodingham Ironstone Member - Ironstone	Sinemurian
-	2	56.0	S	FI-FEST	Frodingham Ironstone Member - Ironstone	Sinemurian
_						

1.3.2 Permeability of Bedrock Ground

Are there any records relating to permeability of bedrock ground within the study site^{*} boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	High	Moderate

1.3.3 Faults

Are there any records of Faults within 500m of the study site boundary?

No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as Faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

^{*} This includes an automatically generated 50m buffer zone around the site





1.4 Radon Data

1.4.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is in a Radon Affected Area, as between 3 and 5% of properties are above the Action Level

1.4.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? Basic radon protective measures are necessary





2 Ground Workings Map



Δ

Current Ground Workings





2 Ground Workings

2.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on Groundsure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping.

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? Yes

The following Historical Surface Ground Working Features are provided by Groundsure:

ID	Distance (m)	Direction	NGR	Use	Date
1A	32.0	E	490305 412645	Water Body	1994
2A	32.0	E	490305 412645	Water Body	1977
3B	126.0	SE	490340 412078	Pond	1994
4B	126.0	SE	490340 412078	Pond	1977
5	173.0	Ν	490218 412550	Unspecified Heap	1994
6	187.0	E	490876 412259	Refuse Heap	1994
7	188.0	E	490878 412217	Refuse Heap	1977
8C	192.0	Ν	490180 412518	Pond	1994
9C	192.0	Ν	490180 412518	Pond	1977
10	204.0	SE	490219 411919	Pond	1951
11	217.0	SE	490320 411924	Refuse Heap	1977
12D	228.0	W	489985 412235	Reservoir	1980
13D	228.0	W	489985 412235	Reservoir	1990
14E	229.0	E	490614 412324	Refuse Heap	1906
15E	229.0	E	490614 412324	Refuse Heap	1938
16	246.0	SW	490008 412125	Unspecified Pit	1951





2.2 Historical Underground Working Features derived from Historical Mapping

This data is derived from the Groundsure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary? Yes

The following Historical Underground Working Features are provided by Groundsure:

ID	Distance (m)	Direction	NGR	Use	Date
Not shown	840.0	W	489343 412343	Tunnel	1938
Not shown	840.0	W	489343 412343	Tunnel	1906

2.3 Current Ground Workings

This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

Are there any BGS Current Ground Workings within 1000m of the study site boundary?

ID	Distanc e (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
19	72.0	S	490200 412200	Ironstone	Pit Bottom	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Inactive
20	112.0	Ν	490200 412412	Ironstone	Crosby Warren	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	295.0	Ν	490200 412600	Ironstone	Crosby Warren	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Inactive
Not shown	565.0	SW	489707 412042	Ironstone	Elm Cottages	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	688.0	S	490500 411600	Ironstone	Trent Remine	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Inactive
Not shown	756.0	E	491000 412500	Ironstone	Crosby Warren Quarry	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Inactive
Not shown	756.0	E	491000 412500	Ironstone	Crosby Warren	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Inactive
Not shown	794.0	Ν	490300 413100	Ironstone	Crosby	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Inactive

The following Current Ground Workings information is provided by British Geological Survey:

Yes





ID	Distanc e (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
Not shown	804.0	Ν	490100 413100	Ironstone	Crosby	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Inactive





3 Mining, Extraction & Natural Cavities Map







3 Mining, Extraction & Natural Cavities

3.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary?

Yes

The following Historical Mining information is provided by Groundsure:

ID	Distance (m)	Direction	NGR	Details	Date
 2	589.0	E	491138 412896	Ironstone Quarries	1951
Not shown	867.0	Ν	490265 413567	Ironstone Quarries	1951

3.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary?

No

Database searched and no data found.

3.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary?

Yes

The following information provided by JPB is not represented on mapping: Whilst outside of an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) have information such as mining plans and maps held within their archive of mining activities that have occurred within 1km of this property. Further details and a quote for services can be obtained by emailing this report to enquiries.gs@jpb.co.uk.





Yes

3.4 Non-Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary?

The following non-coal mining information is provided by the BGS:

ID	Distance (m)	Direction	Name	Commodity	Assessment of likelihood
1	153.0	Ν	Scunthorpe	Iron Ore	Underground mining is known to have occurred within or very close to the area. Potential for difficult ground conditions should be investigated. Potential for localised subsidence is at a level where it should be considered

3.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled "Review of mining instability in Great Britain, 1990" PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary? No

Database searched and no data found.

3.6 Natural Cavities

This dataset provides information based on Peter Brett Associates natural cavities database.

Are there any Natural Cavities within 1000m of the study site boundary?

No

Database searched and no data found.

3.7 Brine Extraction

This data provides information from the Coal Authority issued on behalf of the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary?

No

Database searched and no data found.





3.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary?

Database searched and no data found.

3.9 Tin Mining

This dataset provides information on tin mining areas and is derived from tin mining records. This search is based upon postcode information to a sector level.

Are there any Tin Mining areas within 1000m of the study site boundary?

Database searched and no data found.

3.10 Clay Mining

This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

Are there any Clay Mining areas within 1000m of the study site boundary?

No

No

No

Database searched and no data found.





4 Natural Ground Subsidence 4.1 Shrink-Swell Clay Map







4.2 Landslides Map







4.3 Ground Dissolution Soluble Rocks Map









Very Low

4.4 Compressible Deposits Map

Report Reference: EMS-390782_522944 Client Reference: EMS_390782_522944

125

250

Search Buffers (m)

High




4.5 Collapsible Deposits Map







4.6 Running Sand Map







4 Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site** boundary? Moderate

4.1 Shrink-Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

IC	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Ground conditions predominantly non-plastic. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

4.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

4.3 Ground Dissolution of Soluble Rocks

The following Ground Dissolution information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

^{*} This includes an automatically generated 50m buffer zone around the site





4.4 Compressible Deposits

The following Compressible Deposits information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Moderate	Significant potential for compressibility problems. Do not drain, load or de-water ground near the property without technical advice. For new build, consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property, possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.
2	13.0	NW	Negligible	No indicators for compressible ground identified. No special actions required to avoid problems due to compressible ground. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible ground.

4.5 Collapsible Deposits

The following Collapsible Rocks information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.
2	13.0	NW	Negligible	No indicators for collapsible deposits identified. No actions required to avoid problems due to collapsible deposits. No special ground investigation required, or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

4.6 Running Sands

The following Running Sands information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
2	13.0	NW	Low	Possibility of running sand problems after major changes in ground conditions. Normal maintenance to avoid leakage of water-bearing services or water bodies (ponds, swimming pools) should reduce likelihood of problems due to running sand. For new build, consider possibility of running sand into trenches or excavations if water table is high or sandy strata are exposed to water. Avoid concentrated water inputs to site. Unlikely to be an increase in construction costs due to potential for running sand. For existing property, no significant increase in insurance risk due to running sand problems is likely.





5 Borehole Records Map







5 Borehole Records

The systematic analysis of data extracted from the BGS Borehole Records database provides the following information.

Records of boreholes within 250m of the study site boundary:

0

Database searched and no data found.





6 Estimated Background Soil Chemistry

Records of background estimated soil chemistry within 250m of the study site boundary:

27

For further information on how this data is calculated and limitations upon its use, please see the Groundsure Geo Insight User Guide, available on request.

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
13.0	NW	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
53.0	W	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
56.0	S	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
91.0	SE	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
92.0	SE	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
102.0	SW	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
173.0	E	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
175.0	SE	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
192.0	Ν	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
194.0	Ν	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
194.0	Ν	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
211.0	SW	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
220.0	E	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
225.0	W	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
225.0	W	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
231.0	W	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
231.0	W	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
233.0	E	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
235.0	NE	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
236.0	W	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
236.0	W	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
242.0	S	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
249.0	S	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
249.0	S	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	40 - 60 mg/kg	<15 mg/kg	<100 mg/kg
250.0	SW	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg
250.0	SW	RuralSoil	60 - 120 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	45 - 60 mg/kg	<100 mg/kg

*As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.





7 Railways and Tunnels Map







7 Railways and Tunnels

7.1 Tunnels

This data is derived from OpenStreetMap and provides information on the possible locations of underground railway systems in the UK - the London Underground, the Tyne & Wear Metro and the Glasgow Subway.

Have any underground railwa	v lines been identified within the stu	dv site boundary?	No
i lave any anaergi bana raitwa	y three been identified within the sta	ay site soundary.	110

Have any underground railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels Map.

This data is derived from Ordnance Survey mapping and provides information on the possible locations of railway tunnels forming part of the UK overground railway network.

Have any other railway tunnels been identified within the site boundary?	No

Have any other railway tunnels been identified within 250m of the site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels Map.

7.2 Historical Railway and Tunnel Features

This data is derived from Groundsure's unique Historical Land-use Database and contains features relating to tunnels, railway tracks or associated works that have been identified from historical Ordnance Survey mapping.

Have any historical railway or tunnel features been identified within the study site boundary? Yes

Have any historical railway or tunnel features been identified within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Details	Date
1	0	On Site	490851 412495	Railway Sidings	1956
2A	11	NE	490285 412496	Mineral Railway Sidings	1994
3A	11	NE	490285 412496	Mineral Railway Sidings	1977
13	32	SW	n/a	Railways	1907
4B	44	S	490409 412094	Railway Sidings	1938
5B	44	S	490409 412094	Railway Sidings	1906



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ID	Distance (m)	Direction	NGR	Details	Date
14	46	S	490361 412150	Railway Sidings	1907
6	95	E	490378 412102	Railway Sidings	1948
15	113	E	490395 412266	Mineral Railway Sidings	1975
7	120	NE	490286 413205	Railway Sidings	1906
16	121	E	490417 412251	Mineral Railway Sidings	1988
8	133	NE	490093 412624	Railway Sidings	1906
17	137	NE	490156 412834	Railway Sidings	1907
9D	158	NE	490545 412553	Railway Sidings	1906
18	158	E	490405 412405	Mineral Railway Sidings	1975
19D	161	NE	490552 412551	Railway Sidings	1907
10	176	NE	490406 412875	Railway Sidings	1906
20E	183	SE	490394 412082	Mineral Railway Sidings	1964
21E	184	SE	490396 412081	Mineral Railway Sidings	1964
22	186	SE	490356 412048	Railway Sidings	1997
23	197	SE	490265 411978	Railway Sidings	1907
11C	231	NE	490530 412423	Railway Sidings	1906
24F	236	SE	490409 412038	Mineral Railway Sidings	1964
25F	236	SE	490409 412038	Mineral Railway Sidings	1975
26F	236	SE	490408 412038	Mineral Railway Sidings	1964
12C	247	NE	490533 412420	Railway Sidings	1906

Any records that have been identified are represented on the Railways and Tunnels Map.

7.3 Historical Railways

This data is derived from OpenStreetMap and provides information on the possible alignments of abandoned or dismantled railway lines in proximity to the study site.

Have any historical railway lines been identified within the study site boundary?	No
Have any historical railway lines been identified within 250m of the study site boundary?	Yes

Distance (m)	Direction	Status
11	NE	Abandoned

Report Reference: EMS-390782_522944 Client Reference: EMS_390782_522944



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Distance (m)	Direction	Status
24	E	Abandoned
148	E	Abandoned
185	SE	Abandoned
188	SE	Abandoned

Note: multiple sections of the same track may be listed in the detail above

Any records that have been identified are represented on the Railways and Tunnels Map.

7.4 Active Railways

These datasets are derived from Ordnance Survey mapping and OpenStreetMap and provide information on the possible locations of active railway lines in proximity to the study site.

Have any active railway lines been identified within the study site boundary?	No

Have any active railway lines been identified within 250m of the study site boundary? Yes

Distance (m)	Direction	Name	Туре
109	E	Not given	Multi Track
110	E	Not given	Rail

Note: multiple sections of the same track may be listed in the detail above Any records that have been identified are represented on the Railways and Tunnels Map.

7.5 Railway Projects

These datasets provide information on the location of large scale railway projects High Speed 2 and Crossrail 1.

Is the study site within 5km of the route of the High Speed 2 rail project?	No
Is the study site within 5km of the proposed alternative route of the High Speed 2 rail project?	No
Is the study site within 500m of the route of the Crossrail 1 rail project?	No

Further information on proximity to these routes, the project construction status and associated works can be obtained through the purchase of a Groundsure HS2 and Crossrail 1 Report.

The route data has been digitised from publicly available maps by Groundsure. The route as provided relates to the Crossrail 1 project only, and does not include any details of the Crossrail 2 project, as final details of the route for Crossrail 2 are still under consultation.

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> British Gypsum British Gypsum Ltd East Leake Loughborough Leicestershire LE12 6HX

The Coal Authority

200 Lichfield Lane Mansfield Notts NG18 4RG Tel: 0345 7626 848 DX 716176 Mansfield 5 www.coal.gov.uk

British



Geological Survey

NATURAL ENVIRONMENT RESEARCH COUNCIL

The Coal Authority

Public Health England

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Tel: 08456 050505 Website: http://www.ordnancesurvey.co.uk/

Getmapping PLC Virginia Villas, High Street, Hartley Witney,

Hampshire RG27 8NW Tel: 01252 845444 Website:**http://www1.getmapping.com/** Public Health England

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Bell Waste Site, Winterton Road, Scunthorpe

Client Ref: Report Ref: Grid Ref:	EMS_390782_522943 EMS-390782_522943 490253, 412278
Map Name:	County Series
Map date:	1885-1886
Scale:	1:10,560
Printed at:	1:10,560



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Bell Waste Site, Winterton Road, Scunthorpe

Client Ref: Report Ref: Grid Ref:	EMS_390782_522943 EMS-390782_522943 490253, 412278
Map Name:	County Series
Map date:	1906
Scale:	1:10,560
Printed at:	1:10,560



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Bell Waste Site, Winterton Road, Scunthorpe

Client Ref: Report Ref: Grid Ref:	EMS_390782_522943 EMS-390782_522943 490253, 412278
Map Name:	County Series
Map date:	1938
Scale:	1:10,560
Printed at:	1:10,560



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Bell Waste Site, Winterton Road, Scunthorpe

Client Ref: Report Ref: Grid Ref:	EMS_390782_522943 EMS-390782_522943 490253, 412278
Map Name:	County Series
Map date:	1948
Scale:	1:10,560
Printed at:	1:10,560



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Site Details:

Bell Waste Site, Winterton Road, Scunthorpe

Client Ref: Report Ref: Grid Ref:	EMS_390782_522943 EMS-390782_522943 490253, 412278	
Map Name:	Provisional	Ν
Map date:	1956	
Scale:	1:10,560	₩ T Ĕ
Printed at:	1:10,560	S





Production date: 02 November 2016





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Site Details:

Bell Waste Site, Winterton Road, Scunthorpe

Grid Ref:	490253, 412278
Map Name:	National Grid
Map date:	1969

1:10,000 Scale:

Printed at: 1:10,000





Production date: 02 November 2016





Site Details:

Bell Waste Site, Winterton Road, Scunthorpe

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	90782_522943 3, 412278 nal Grid 1980 00





Production date: 02 November 2016





Site Details:

Bell Waste Site, Winterton Road, Scunthorpe

Client Ref: Report Ref: Grid Ref:	EMS_390782_522943 EMS-390782_522943 490253, 412278	
Map Name:	National Grid	Ν
Map date:	1990-1994	
Scale:	1:10,000	
Printed at:	1:10,000	S





Production date: 02 November 2016





Site Details:

Bell Waste Site, Winterton Road, Scunthorpe

Client Ref: Report Ref: Grid Ref:	EMS_390782_522943 EMS-390782_522943 490253, 412278
Map Name:	1:10,000 Raster
Map date:	2002
Scale:	1:10,000
Printed at:	1:10,000



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Client Ref: Report Ref: Grid Ref:	EMS_390782_522943 EMS-390782_522943 490253, 412278	
Map Name:	National Grid	Ν
Map date:	2010	
Scale:	1:10,000	
Printed at:	1:10,000	S





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Bell Waste Site, Winterton Road, Scunthorpe

Client Ref: Report Ref: Grid Ref:	EMS_390782_522943 EMS-390782_522943 490253, 412278	
Map Name:	National Grid	Ν
Map date:	2014	
Scale:	1:10,000	Ψ ⁻
Printed at:	1:10,000	S





Production date: 02 November 2016