

**GEOTECHNICAL &
GEO- ENVIRONMENTAL REPORT
AGGREGATE PRODUCTION AREA,
CELSA, ROVER WAY, CARDIFF**

Prepared for:
HARSCO Metals and Minerals

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Report: Aggregate Production Area,
CELSA, Rover Way, Cardiff**

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PREPARED BY :
(Mr D Emanuel)

REVIEWED BY :
(Mr T. Walby)

APPROVED BY :
(Dr G. C. Lake)

Executive Summary

HARSCO Metals and Minerals are proposing the development of an asphalt and aggregate production area at the CELSA Manufacturing UK Ltd scrap yard site on the southern side of Rover Way, Cardiff.

The site currently comprises an area of made up ground with a concrete hard standing.

The site is underlain by a mantle of very dense made ground over alluvium. The Mercia Mudstone Group locates beneath the alluvium.

A site investigation comprising six rotary probe boreholes (three shallow, three deep) was performed in April 2019. Groundwater wells were installed in the boreholes and the shallow wells were also used for soil gas monitoring and organic vapour monitoring.

Soil Chemical Testing of the made ground did not detect determinants in excess of the Generic Assessment Criteria for a Commercial/Industrial setting.

Several minor exceedances were recorded in groundwater which are not considered significant given the sites setting.

The first round of shallow gas monitoring placed the site in Gas Characteristic Situation 1, requiring no specialist gas protection measures. Photo-Ionisation Detector monitoring did not detect organic vapours. Higher levels of gas have been detected at greater depth, likely associated with organic material within the alluvium. If deep foundations are proposed, a piling risk assessment should be performed to assess the risk of creating a pathway for the gas. Additional gas and groundwater monitoring should be performed

An Envirocheck Report for the site revealed that No Radon Protection is required for new development at the site.

Very dense made ground was encountered beneath the site to a depth of between 7.3m and 7.7m depth. If foundation loads can be kept below 50kN/m² and 25mm differential settlement can be tolerated between foundations, mass concrete pads, limited to 2.5m x 2.5m could be employed within the made ground, set upon a controlling layer of compacted Type 1 Aggregate. If larger loads or lower tolerances are necessary we would recommend piled foundations extending to the Mercia Mudstone Group.

Any significant site raising would result in settlement of the site due the alluvium.

Soakage testing at the southern boundary of the site recorded high soakage rates within the made ground.

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SECTION 1 Introduction and Proposed Development

HARSCO Metals and Minerals are proposing the development of an Asphalt and Aggregate Production Area within the CELSA Manufacturing UK Limited site, located south of Rover Way, Cardiff.

Terra Firma (Wales) Limited has been commissioned by HARSCO Metals and Minerals to undertake a geo-environmental assessment and geotechnical investigation of the site.

The main objectives of the geo-environmental assessment programme were to:

- Identify the potential environmental liabilities at the site associated with any soil contamination from past site uses.
- Provide a summary of the environmental conditions at the site, together with any necessary remediation works to render the site fit for its intended use.
- Provide recommendations with regard to radon.

The main objectives of the geotechnical site investigation were to:

- Determine the type, strength and bearing characteristics of the shallow superficial deposits.
- Provide recommendations for a suitable and economic foundation solution for the development.
- Provide recommendations with regard to any other geotechnical aspects pertaining to the development.

In order to achieve the above objectives, Terra Firma (Wales) Limited carried out an assessment programme including a review of existing data, followed by a field investigation to determine the prevailing ground conditions and also to collect and analyse soil samples from selected locations around the site.

1.1 Limitations and Exceptions of Investigation

The geo-environmental and geotechnical investigation was conducted and this report has been prepared for the sole internal reliance of Harsco Metals and Minerals and their design and construction team. This report shall not be relied upon or transferred to any other parties without the express written authorisation of Terra Firma (Wales) Limited. If an unauthorised third party comes into possession of this report they rely on it at their peril and the authors owe them no duty of care and skill.

The report represents the findings and opinions of experienced geo-environmental and geo-technical consultants. Terra Firma (Wales) Limited does not provide legal advice and the advice of lawyers may also be required.

The subsurface geological profiles, any contamination and other plots are generalised by necessity and have been based on the information found at the locations of the exploratory holes and depths sampled and tested.

SECTION 2 Review of Existing Data

2.1 Physical Setting, Current Use and Site Conditions

The site locates to the south side of Rover Way, Cardiff, centred on an approximate National Grid Reference of 321275, 176149. The proposed development occupies an approximate plan area of 2.4 hectares. The location of the site is presented in **Figure 2.1**.



Figure 2.1: Site Location (NTS)

The site was visited in March 2019. The site was seen to comprise a large relatively flat open area comprising recovered land made of slag with areas of hardstanding.

The flat area extends beyond the current study site and the area is surrounded by a high metal security fence. An electricity sub-station locates approximately 200m northeast of the site and a gantry passes over the entrance to the site and runs to the northeast of the site.

A concrete hard-standing lies beneath the proposed Asphalt Area whilst the ground beneath the Aggregate Production Area is currently covered with aggregate.

2.2 Site History

The history of the site has been traced using historical Ordnance Survey maps obtained from Landmark Information Group. The maps are presented in **Annex A**. A summary of the sites history is presented in **Table 2.1**;

Table 2.1. Summary of Historical Plans		
Dates	On-Site	Off-Site
1880	The site locates on a salt marsh in the estuary. A channel rund to the northeast of the site. The site locates below Mean High Water	Land locates immediately northwest of the site. The land is undeveloped.
1885/1886	As Previously	Tharsis Copper Works locates 1.4 km southwest of the site.
1900/1901	As Previously	Urban development and a Railway Line locate over 1km west of the site.
1919/1920	As Previously	As Previously
1922	As Previously	As Previously
1938/1947	As Previously	Further urban expansion is shown 475m northwest of the site in Splott
1947 (Aerial Photo)	Site can be seen to comprise mud flats	Evidence of Cardiff Airport 550m north of the site.
1947/1954	As Previously	Sewage outfalls locate 250m northeast and 500m east-northeast of the site.
1952/1957	As Previously	Tremorfa Rolling Mill locates 500m southwest of the site. A pumping station locates 470m northeast of the site.
1965	The site comprises part of a large tip extending onto the flats. Mean High Water locates to the east of the reclaimed land	
1975		The tip is shown to have extended southeast. Tracks traverse the tip. A steel rolling mill and other unspecified works locate 300m southwest. Rover Works locate 700m north on Pengam Moor. A school locates 450m northwest.
1982	Study site is undeveloped..	Shows buildings on the current CELSA Works site.
1989	The tips are traversed by railway/tram lines	A substation locates 250m north of the site. Extensive development of industrial buildings at the current CELSA site. A caravan site locates 600m northeast of the site.
1992	As Previously	
2003	As Previously	A superstore locates on Pengam Green 750m northeast of the site.
2009	Study site is labelled as a scrap yard	
2018	Site labelled as a Recycling Site. Conveyors locate within the site	
Note: Distances are approximate		

2.3 Geological

2.3.1 Geology

The 1:50,000-scale geological map (British Geological Survey Sheet 263, (1977)) shows the site to be underlain by rocks of the Mercia Mudstone Group. The bedrock is shown to have a superficial cover of estuarine alluvium.

Made Ground is known to cover the site.

2.3.2 Coal Mining

The study site locates outside the South Wales Coal Field.

2.3.3 Radon

The Envirocheck Report states that No Radon protective measures are necessary in the construction of new dwellings or extensions

A copy of the Envirocheck Report is included in **Annex A**.

2.4 Environmental Setting

2.4.1 Hydrogeology and Hydrology

The Envirocheck Report records that the bedrock deposits are beneath the site are classified as a Secondary B Aquifers. Superficial deposits are recorded as Secondary (Undifferentiated).

The nearest surface water feature recorded by the Envirocheck Report locates approximately 300m southeast of the site.

2.4.2 Flooding

The Envirocheck agency and Hydrological Map shows the study site to lie immediately southwest of areas affected by Extreme (i.e. Zone 2) Flooding.

The Surface Water Flood Risk Map shows areas in the vicinity of the site to be affected by low risk (i.e 1,000 yr return) flooding. A site specific assessment is recommended.

A site specific assessment is recommended to ascertain necessary development levels.

2.4.3 Waste

The study site is shown to locate within a landfill operated by British Steel Corporation. The site is shown to have received Inert and Industrial Waste. Numerous other landfills locate within 250m of the study site with wastes including Inert, Household, Industrial and Special Waste.

SECTION 3 Preliminary Qualitative Human Health and Environmental Risk Assessment

3.1 General

The contaminated land regime is set out in Part IIA of the Environmental Protection Act (EPA) 1990 and was introduced on the 1st April 2000 in England and 1st July 2001 in Wales. A similar regime was introduced in Scotland on 14th July 2000. Part IIA was introduced to achieve two aims:

- (1) The identification of contaminated land
- (2) The remediation of contaminated land that poses an unacceptable risk to human health and/or the environment

Under Part IIA the statutory definition of 'contaminated land' is: any land which appears to the local authority in whose area it is situated, to be in such a condition, by reason of substances in, on, or under the land, that:

- (a) Significant harm is being caused or there is a significant possibility of such harm being caused; or
- (b) Pollution of controlled waters is being, or is likely to be, caused."

For land to be classified as 'Contaminated Land' there must be a 'pollutant linkage'.

For our definitions of pollution linkage and how we define risk please refer to **Annex B** which includes our classifications of consequence and probability and risk assessment matrix.

3.2 Preliminary Site Conceptual Model

The preceding sections enable a preliminary conceptual model of the site to be drawn up, to illustrate the likely ground conditions beneath the site together with a preliminary assessment of the nature of any underlying aquifer and groundwater movement. The preliminary site conceptual model is used as a model for the design and implementation of the site investigation, whereby areas of potential contamination can be targeted as well as investigating the site as a whole.

3.2.1 Potential Sources of Contamination and Gas

The potential contamination beneath the site, whether in the matrix of soil or any groundwater will be related to site past use and the history of the surrounding area.

Historical map review has revealed that the site comprises recovered land, built up with imported material, most probably from the nearby steel works (i.e. slag). The ground is therefore likely to reflect this origin. The site was more recently described as a scrap yard and recycling site and this is likely to be reflected in the soils chemistry.

There are numerous landfills within 250m of the site and the site itself locates within an area of fill.

We would therefore consider there to be a **high risk** of contamination being present at the site and the risk from soil gas to be **high** on account of the nearby landfills and potential natural peat deposits within the alluvium.

3.2.2 Potential Receptors, Pathways and Risks

There are both human and hydrological receptors to any contamination that may be present on site.

Construction workers will be excavating in soils and will be exposed via dermal contact with soils and dust, ingestion of soil dust and inhalation of soil dust.

Inhalation of asbestos fibres is also a possible risk, if present in the made ground, as is inhalation of vapours.

A commercial end use is proposed. Once developed, future site users will potentially be at risk from the same pathways.

Neighbouring site users and passers-by may potentially be exposed to soil dust, asbestos fibres and vapours during the earthworks phase.

If any contamination is identified this may be leachable, enabling it to mobilise through groundwater within site soils although thick deposits of alluvium are likely to hinder significant migration of dissolved contaminants.

SECTION 4 Field Investigation

4.1 Site Works

A geotechnical and geo-environmental site investigation was carried out between 1st and 5th April 2019.

Terra Firma Wales Ltd were informed that the Aggregate Production Area will continue to operate using mobile plant and consequently the site investigation was targeted on the proposed installation area of the proposed asphalt area.

Six rotary boreholes were performed at the site to assess the density of the made ground and prove the depth of rock-head and to allow the installation of deep and shallow groundwater and gas monitoring wells.

The fieldworks were supervised by Terra Firma (Wales) Limited.

The Rotary Borehole Logs are presented in **Annex C**.

Exploratory hole positions are given on **Figure 4.1**.

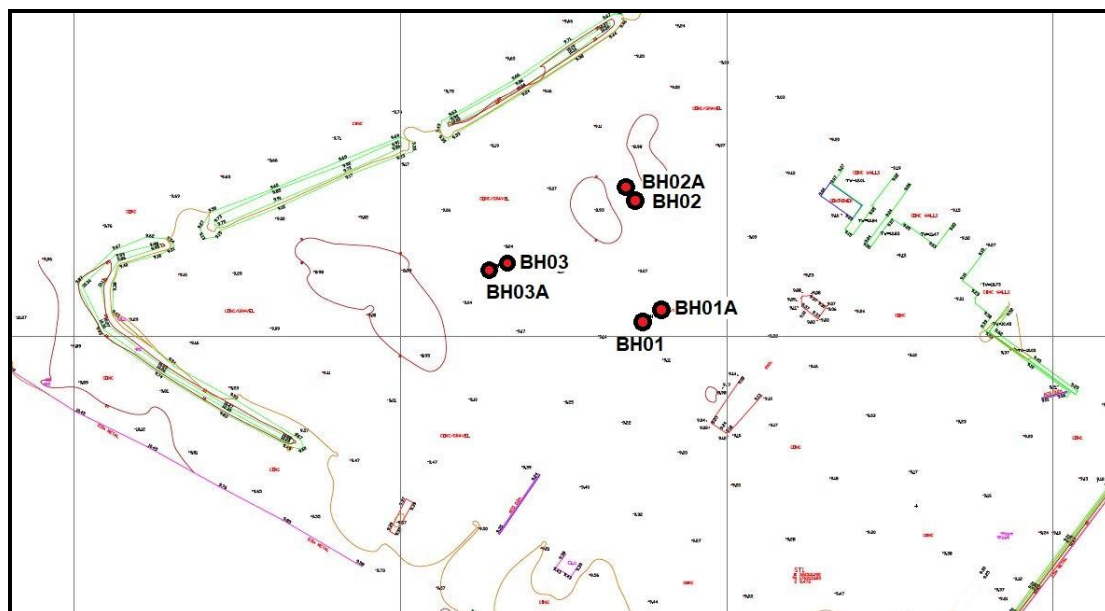


Figure 4.1. Exploratory Hole Locations

4.2 Ground Conditions

Ground conditions were determined from the arisings of the rotary boreholes. In addition to the drill arisings, in-situ testing, and general drilling observations revealed the nature of the material being drilled. A summary of the ground conditions identified in the boreholes is given in **Table 4.1** below.

Table 4.1 Summary of Ground Conditions		
Depth (m)	Thickness (m)	Stratum
0.00 - 7.30/7.70 (Not fathomed in BH02A at 7.5m)	7.30/7.70	CONCRETE over MADE GROUND: Recovered as predominantly granular, black to grey, with brick and concrete fragments apparent. Material very dense (SPT(C) Values >50)
7.30/7.70 - 15.00/16.40	7.5/8.9	ALLUVIUM: Very soft to soft CLAY
15.00/16.40 - >21.00	-	WEATHERED MARL

4.3 Groundwater

A perched groundwater body was encountered within the made ground and a sub-artesian groundwater body was encountered beneath the alluvium, rising within boreholes.

During monitoring on the 16th April 2019, the perched groundwater body was encountered at depths of between 4.59m and 4.65m below ground level and the deeper body was encountered between 7.52m and 7.62m below ground level.

4.4 Laboratory Chemical Testing

4.4.1 Exploratory Strategy and Sampling Regime

During rotary drilling small disturbed soil samples of arisings were collected.

The sample locations and depths are listed in **Table 4.2**.

Table 4.2 Sample Locations and Depths	
Sample	Depth (m)
BH01	0.50 – 1.50m
BH02	0.50 – 1.50m
BH03	0.50 – 1.50m

4.4.2 Soil Laboratory Analysis

The soil samples taken were despatched to the laboratories of Derwentside Environmental Testing Services Limited.

The following chemical tests were undertaken:

Metals and Metalloids

Lead
Arsenic
Mercury
Chromium
Copper
Nickel
Zinc

In-Organics

Cyanide
Sulphate

Others

pH (acidity)
Organic Matter
Asbestos

Organic Chemicals

Phenol
Polycyclic Aromatic Hydrocarbons (PAHs)
Petroleum Hydrocarbons

The laboratory soil chemical test results are presented in **Annex D**.

4.4.3 Groundwater Laboratory Analysis

On 17th April 2019 one round of groundwater monitoring was performed on deep and shallow wells. Groundwater samples were tested for the following determinants;

Metals and Metalloids

Lead
Arsenic
Mercury
Cadmium
Chromium
Copper
Nickel
Zinc
Selenium

In-Organics

Cyanide
Sulphate
CaCO₃
BOD
Sulphide

Others

pH (acidity)
Organic Matter
COD
Conductivity

Organic Chemicals

Phenols
Polycyclic Aromatic Hydrocarbons (Speciated)
Petroleum Hydrocarbons

The laboratory groundwater chemical test results are presented in **Annex E**.

SECTION 5 Soil and Groundwater Analytical Results

5.1 Soil Assessment Methodology

Comparison of the analytical results have been made with Soil Guideline Values (SGVs) for an Industrial/Commercial setting, sourced from Suitable 4 Use Levels (S4ULs) provided by Land Quality Management Limited, Category 4 Screening Levels (C4SLs) and the Chartered Institute of Environmental Health (CIEH) or CLEA Guidelines. Sulphate results have been compared to British Research Establishment (BRE) guidelines as sulphate levels need only be considered for buried concrete risk assessment only, not human health related.

5.2 Soil Test Results

**Table 5.1 Summary of Soil Chemical Test Results
Standard Suite and Asbestos**

Substance	SGV/ GAC/ S4UL (mg/kg)	Source	Measured Concentrations of Tested Substances (mg/kg)		Number of exceedences
			Minimum	Maximum	
Arsenic	640	S4UL	24	29	0
Cadmium	190	S4UL	0.39	0.78	0
Chromium III	8,600	S4UL	96	99	0
Chromium VI	33	S4UL	<0.50	<0.50	0
Copper	68,000	S4UL	37	68	0
Lead	2,330	C4SL	37	64	0
Mercury	1,100	S4UL	0.10	0.15	0
Nickel	980	S4UL	34	40	0
Selenium	12,000	S4UL	2.8	3.3	0
Zinc	730,000	S4UL	140	270	-
Cyanide	480	CLEA	<0.50	0.80	0
Organic matter	-	S4UL	0.60	1.90	-
Sulphate	-	-	3600	5400	-
pH	-	S4UL	9.8	11.6	-
Phenol	440	S4UL	<0.30	<0.30	0
Total PAH	-		<2.0	<2.0	-
Asbestos	-		Not Detected	Not Detected	
Notes <ul style="list-style-type: none"> *See speciated PAH results (Table 5.2) 3 samples were tested 					

5.2 Soil Test Results (Continued)

A summary of the speciated PAH results are given in **Table 5.2** below.

Table 5.2 Summary of Soil Chemical Test Results Speciated PAH					
Substance	GAC (mg/kg)	Source	Measured Concentrations of Tested Substances (mg/kg)		Exceedences
			Minimum	Maximum	
Naphthalene	190	S4UL	<0.10	<0.10	0
Acenaphthylene	83,000	S4UL	<0.10	<0.10	0
Acenaphthene	84,000	S4UL	<0.10	<0.10	0
Fluorene	63,000	S4UL	<0.10	<0.10	0
Phenanthrene	22,000	S4UL	<0.10	<0.10	0
Anthracene	520,000	S4UL	<0.10	<0.10	0
Fluoranthene	23,000	S4UL	<0.10	<0.10	0
Pyrene	54,000	S4UL	<0.10	<0.10	0
Benzo(a)anthracene	170	S4UL	<0.10	<0.10	0
Chrysene	350	S4UL	<0.10	<0.10	0
Benzo(b)fluoranthene	44	S4UL	<0.10	<0.10	0
Benzo(k)fluoranthene	1,200	S4UL	<0.10	<0.10	0
Benzo(a)pyrene	35	S4UL	<0.10	<0.10	0
Indeno(123cd)pyrene	500	S4UL	<0.10	<0.10	0
Dibenzo(ah)anthracene	3.5	S4UL	<0.10	<0.10	0
Benzo(ghi)perylene	3,900	S4UL	<0.10	<0.10	0
Notes: <ul style="list-style-type: none"> • GAC based on 1% soil organic matter content (SOM) • 3 samples were tested 					

5.2 Soil Test Results (Continued)

A summary of the speciated Petroleum Hydrocarbon results are given in **Table 5.3** below.

Table 5.3 Summary of Soil Chemical Test Results Speciated Petroleum Hydrocarbons					
Substance	GAC (mg/kg)	Source	Measured Concentrations of Tested Substances (mg/kg)		Exceedences
			Minimum	Maximum	
ALIPHATIC					
C5 – C6	3,200	S4UL	<1.0	<1.0	0
C6 – C8	7,800	S4UL	<1.0	<1.0	0
C8 – C10	2,000	S4UL	<1.0	<1.0	0
C10 – C12	9,700	S4UL	<1.0	<1.0	0
C12 – C16	59,000	S4UL	<1.0	9.4	0
C16 – C21	1,600,000	S4UL	56	170	0
C21 – C35	1,600,000	S4UL	230	1400	0
C35 – C44	1,600,000	S4UL	<1.0	37	0
AROMATIC					
C5 – C7	26,000	S4UL	<1.0	<1.0	0
C7 – C8	56,000	S4UL	<1.0	<1.0	0
C8 – C10	3,500	S4UL	<1.0	<1.0	0
C10 – C12	16,000	S4UL	<1.0	<1.0	0
C12 – C16	36,000	S4UL	<1.0	1.9	0
C16 – C21	28,000	S4UL	<1.0	16	0
C21 – C35	28,000	S4UL	160	390	0
C35 – C44	28,000	S4UL	<1.0	94	0
Notes:					
<ul style="list-style-type: none"> GAC based on 1% soil organic matter content (SOM) 3 samples were tested 					

5.2 Soil Test Results (Continued)

A summary of the Polychlorinated Biphenyl results are given in **Table 5.4** below.

Table 5.4 Summary of Soil Chemical Test Results Polychlorinated Biphenyls					
Substance	GAC (mg/kg)	Source	Measured Concentrations of Tested Substances (mg/kg)		Exceedences
			Minimum	Maximum	
PCB 28 + PCB 31	-	CLEA	<0.01	<0.01	0
PCB 52	-		<0.01	<0.01	
PCB 101	-		<0.01	<0.01	
PCB 118	-		<0.01	<0.01	
PCB 153	-		<0.01	<0.01	
PCB 138	-		<0.01	<0.01	
PCB 180	-		<0.01	<0.01	
Total PCB	0.240		<0.1	<0.1	
Notes:					
• 3 samples were tested					

In the absence of Toxic Equivalence Factor (TEF) data for the specific compounds encountered at the site it has been necessary to employ the generic CLEA Soil Guideline Value (SGV) for a commercial setting.

5.3 Groundwater Test Results

A round of deep and shallow groundwater monitoring was performed on 16th April 2019. The result of this round of groundwater testing is presented in **Table 5.5** along with the corresponding Water Framework Directive (WFD) Guidelines or, in their absence, WHO Drinking Water Standards.

Project: 15264 - CELSA A.P.													
Client: Terra Firma (Wales) Ltd		Chemtest Job No.:				Guideline	Source	19-13651	19-13651	19-13651	19-13651	19-13651	19-13651
Quotation No.:		Chemtest Sample ID.:						814555	814556	814557	814558	814559	814560
		Sample Location:						BH01	BH01A	BH02	BH02A	BH03	BH03A
		Sample Type:						WATER	WATER	WATER	WATER	WATER	WATER
		Date Sampled:						16-Apr-2019	16-Apr-2019	16-Apr-2019	16-Apr-2019	16-Apr-2019	16-Apr-2019
Determinand	Accred.	SOP	Units	LOD									
pH	U	1010	N/A				8.1	9.6	8.1	9.0	8.0	8.8	
Electrical Conductivity	U	1020	µS/cm	1.0			32000	3000	31000	2400	2300	2400	
Biochemical Oxygen Demand	N	1090	mg O2/l	4.0			71	10	72	6.2	32	7.2	Within Standard
Chemical Oxygen Demand	U	1100	mg O2/l	10			290	41	290	25	130	29	Exceeds Standard
Sulphate	U	1220	mg/l	1.0			960	510	960	500	300	490	
Cyanide (Total) Low-Level	N	1300	mg/l	0.0050	0.001	Salt water WFD	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
Sulphide	U	1325	mg/l	0.050			< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	
Hardness	N	1415	mg/l	1.0			7400	580	7700	620	490	500	
Arsenic (Dissolved)	U	1450	µg/l	1.0	25	Salt water WFD	29	5.5	27	2.7	13	2.7	
Cadmium (Dissolved)	U	1450	µg/l	0.080	0.25	Inland Surface Water	0.10	< 0.080	0.097	< 0.080	< 0.080	< 0.080	
Chromium (Dissolved)	U	1450	µg/l	1.0			68	10	66	8.3	42	4.7	
Copper (Dissolved)	U	1450	µg/l	1.0	3.76	Salt water WFD	33	9.1	88	4.8	48	3.4	
Nickel (Dissolved)	U	1450	µg/l	1.0	4	Inland Surface Water	2.7	< 1.0	2.6	< 1.0	1.6	< 1.0	
Lead (Dissolved)	U	1450	µg/l	1.0	1.2	Fresh water WFD	< 1.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0	
Selenium (Dissolved)	U	1450	µg/l	1.0	10	DWD	< 1.0	20	< 1.0	19	47	19	
Zinc (Dissolved)	U	1450	µg/l	1.0	6.8	Salt water WFD	15	7.5	16	7.5	11	6.0	
Mercury Low Level	U	1460	µg/l	0.010	0.07	Inland Surface Water	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Chromium (Trivalent)	N	1490	µg/l	20	4.7	Fresh water WFD	68	< 20	66	< 20	42	< 20	
Chromium (Hexavalent)	U	1490	µg/l	20	0.6	Salt water WFD	< 20	< 20	< 20	< 20	< 20	< 20	
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10			< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	15000	WHO DWS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	15000	WHO DWS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	300	WHO DWS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	300	WHO DWS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	300	WHO DWS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10			< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10			< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	10	WHO DWS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	700	WHO DWS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	300	WHO DWS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	90	WHO DWS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	90	WHO DWS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	90	WHO DWS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	90	WHO DWS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C35-C44	N	1675	µg/l	0.10			< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Total Petroleum Hydrocarbons	N	1675	µg/l	10			< 10	< 10	< 10	< 10	< 10	< 10	
Naphthalene	N	1800	µg/l	0.010			< 0.010	1.0	< 0.010	< 0.010	< 0.010	< 0.010	
Acenaphthylene	N	1800	µg/l	0.010			< 0.010	1.9	< 0.010	< 0.010	< 0.010	< 0.010	
Acenaphthene	N	1800	µg/l	0.010			< 0.010	1.9	< 0.010	< 0.010	< 0.010	< 0.010	
Fluorene	N	1800	µg/l	0.010			< 0.010	2.2	< 0.010	< 0.010	< 0.010	< 0.010	
Phenanthrene	N	1800	µg/l	0.010			< 0.010	3.5	< 0.010	< 0.010	< 0.010	< 0.010	
Anthracene	N	1800	µg/l	0.010	0.1	Inland Surface Water	< 0.010	1.5	< 0.010	< 0.010	< 0.010	< 0.010	
Fluoranthene	N	1800	µg/l	0.010	0.0063	Inland Surface Water	< 0.010	0.65	< 0.010	< 0.010	< 0.010	< 0.010	
Pyrene	N	1800	µg/l	0.010			< 0.010	0.66	< 0.010	< 0.010	< 0.010	< 0.010	
Benzo[a]anthracene	N	1800	µg/l	0.010			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Chrysene	N	1800	µg/l	0.010			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Benzo[b]fluoranthene	N	1800	µg/l	0.010	0.017	Inland Surface Water	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Benzo[k]fluoranthene	N	1800	µg/l	0.010	0.017	Inland Surface Water	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Benzo[a]pyrene	N	1800	µg/l	0.010	0.00017	Inland Surface Water	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Indeno(1,2,3-c,d)Pyrene	N	1800	µg/l	0.010			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Dibenz(a,h)Anthracene	N	1800	µg/l	0.010			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Benzo[g,h,i]perylene	N	1800	µg/l	0.010	0.0082	Inland surface Water	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Total Of 6 PAHs	N	1800	µg/l	0.10			< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
PCB 28	N	1815	µg/l	0.010			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
PCB 52	N	1815	µg/l	0.010			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
PCB 90+101	N	1815	µg/l	0.010			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
PCB 118	N	1815	µg/l	0.010			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
PCB 153	N	1815	µg/l	0.010			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
PCB 138	N	1815	µg/l	0.010			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
PCB 180	N	1815	µg/l	0.010			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Total PCBs (7 congeners)	N	1815	µg/l	0.010			< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Resorcinol	U	1920	mg/l	0.0050			< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
Phenol	U	1920	mg/l	0.0050			< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
Cresols	U	1920	mg/l	0.0050			< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
Xylenols	U	1920	mg/l	0.0050			< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
1-Naphthol	N	1920	mg/l	0.0050			< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
Trimethylphenols	U	1920	mg/l	0.0050			< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
Total Phenols	U	1920	mg/l	0.030	7.7	Salt water WFD	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	

Table 5.5. Groundwater

5.4 Soil Gas Monitoring

One round of Soil Gas Monitoring was performed prior to the issue of this report. The results are summarise in **Table 5.6** and are presented in **Annex F**.

Table 5.6. Summary of Gas Monitoring							
	CH4 (%)	CO2 (%)	O2 (%)	CO ppm	H2S ppm	FLOW (l/hr)	AP (mb)
SHALLOW WELLS (BH01A – BH03A)							
Minimum	0.2	0.1	17.1	0	0	0.0	1016
Maximum	4.8	1.4	20.2	0	0	0.0	1016
DEEP WELLS (BH01 – BH03)							
Minimum	0.2	0.0	0.2	0	0	0.1	1016
Maximum	47.7	0.1	20.1	0	0	0.0	1016

We understand that there are no buildings proposed as part of the current development. However, based on the results of the first round of gas monitoring the following conclusions are made if buildings were to be constructed.

Based on the results of gas monitoring from the shallow wells a Gas Screening Value of; $0.048 \text{ (highest CO}_2\text{)} \times 0.1 \text{ (detection limit of flow meter)} = 0.0048 \text{ l/hr}$ is calculated.

With reference to Table 8.5 of CIRIA C665, this would place the site within Gas Characteristic Situation 1, requiring no special gas protection measures.

Higher levels of gas were detected within the deeper wells, most likely associated with natural organic material in the alluvium. Shallow monitoring has revealed that the deep gas is contained and does not currently affect the shallow ground. However, if piled foundations are proposed, monitoring should be performed during and after the piling to confirm that the piling has not created new pathways to the surface.

The above recommendations are based on a single round of gas monitoring and at least five further rounds of gas monitoring should be performed, under various air pressure conditions, to confirm the above conclusions.

Soil Gas Monitoring results are presented in **Annex F**.

Photo-Ionisation Detector (P.I.D.) monitoring of the wells did not detect any organic vapours.

SECTION 6 Quantitative Risk Assessment

6.1 Contaminants of Concern in Soil

It can be seen from Section 5 that all determinants tested were present at concentrations below the published Generic Assessment Criteria for a Commercial/Industrial Setting. Asbestos was not detected during screening.

Vapour monitoring of the gas wells, using a Photo-Ionisation Detector (P.I.D.), did not detect and organic vapours.

6.2 Contaminants of Concern in Groundwater

A summary of exceedances recorded in shallow groundwater during the first round of monitoring is presented in **Table 6.1**.

Table 6.1. Summary of Shallow Groundwater Exceedances			
Determinant	Assessment Criteria (ug/l)	Recorded Concentration (ug/l)	Location
Round 16/04/2019			
Copper	3.76	9.1	BH01A
		4.8	BH02A
Selenium	10	20	BH01A
		19	BH02A
		19	BH03A
Zinc	6.8	7.5	BH01A
		7.5	BH02A
Anthracene	0.1	1.5	BH01A
Fluoranthene	0.0063	0.65	BH01A

A summary of exceedances in deep groundwater is presented in **Table 6.2**.

Table 6.2. Summary of Deep Groundwater Exceedances			
Determinant	Assessment Criteria (ug/l)	Recorded Concentration (ug/l)	Location
Round 16/04/2019			
Arsenic	25	29	BH01
		27	BH02
Copper	3.76	33	BH01
		88	BH02
		48	BH03
Selenium	10	47	BH03
Zinc	6.8	15	BH01
		16	BH02
		11	BH03
Chromium III	4.7	68	BH01
		66	BH02
		42	BH03

6.3 Potential Receptors and Pathways

6.3.1 Human Receptors

Construction workers may be in intimate contact with the site soils and are potentially at risk from exposure to determinants within the made ground through dermal contact, ingestion and inhalation pathways.

Neighbouring site users and passers-by are potentially exposed to soil dust during earthworks.

Future site users are potentially at risk from determinants exceeding the Generic Assessment Criteria via dermal contact with soils, inhalation of soils and dust. Development offers an opportunity to address the issues.

It is understood that the existing hard-standing cover is to remain in-situ except at locations where new foundations necessitate its excavation. The site is therefore capped with hardstanding.

6.3 2 Aquatic Environment

Slightly elevated copper, selenium and zinc were encountered in shallow wells during the first round of groundwater monitoring. This is not considered significant given the sites setting. Two exceedances of PAH guidelines were also recorded although the guidelines are very stringent. The High Molecular Weight PAHs have very low solubilities and low mobility characteristics and are unlikely to impact significantly beyond their source.

During the first round of monitoring arsenic copper selenium zinc and chromium III were encountered in the deep wells. Given the sites surroundings the recorded levels are not considered significant and the levels may have originated at an off-site source.

6.4 Mitigation and Remedial Measures

6.4.1 Site Workers

In order to protect construction workers good site management, COSHH, good standards of hygiene and appropriate health & safety on site should be adhered to, with personal protection equipment (PPE) and dust suppression where appropriate. The elected contractor should provide their own risk assessment to mitigate these risks

6.4.2 Neighbouring Site Users

Appropriate dust suppression should be employed to prevent the migration soil dust during the earthworks phase.

6.4.3 Site End Users

Chemical testing of soils in the proposed excavation areas did not detect determinants in excess of the Generic Assessment Criteria (GAC) for a Commercial/Industrial setting.

We understand that the proposed development will include the retention of hard standing cover in the development area and this should interrupt the pathway between the contaminants and the site end users.

If ground raising is performed, this should be carried out using materials that conform to the Commercial/Industrial GACs.

A Potable Water Supply Pipe Material Assessment should be carried out by the water provider.

If during development works any other unexpected ground conditions or evidence of contamination is found, inspection by a geo-environmental engineer should be made, and any required testing or investigation carried out prior to continuation of works.

6.4.4 Aquatic Environment

Several minor exceedances of metals and PAH were noted during the initial groundwater monitoring although these are not considered to be significant given their magnitude and also the low mobility characteristics of the PAHs.

There is not considered to be significant risks to the aquatic environment from site soils given the sites location.

During the construction period, there is a risk to the environment/adjacent sites from de-watering, digging foundations, moving soil, drainage misconnections, discharges to local surface waters or the ground, runoff from construction materials and/or exposed ground, wheel washings and oil or chemical spills.

The risk is considered to be negligible as any adverse effects will be easily preventable by due diligence to good construction practise and housekeeping in preventing surface runoff and the spillage of materials.

The basic measures that should be taken are as follows:

- Prepare a drainage plan and mark the manholes to prevent pollutants accidentally reaching the surface water sewers;
- Carry out any activities that could cause pollution in a designated, bunded area, away from rivers or boreholes. Where possible it should drain to the foul sewer;
- Use settlement ponds or separators to remove silty water;
- Store all oils and chemicals in a fully bunded area to prevent leaks or spills;
- Get advice on whether you need an environmental permit and apply in good time

If piled foundations are to be employed a Piling Risk Assessment, including further rounds of monitoring during and after piling, should be performed.

6.5 Site Conceptual Model

A Site Conceptual Model is presented below;

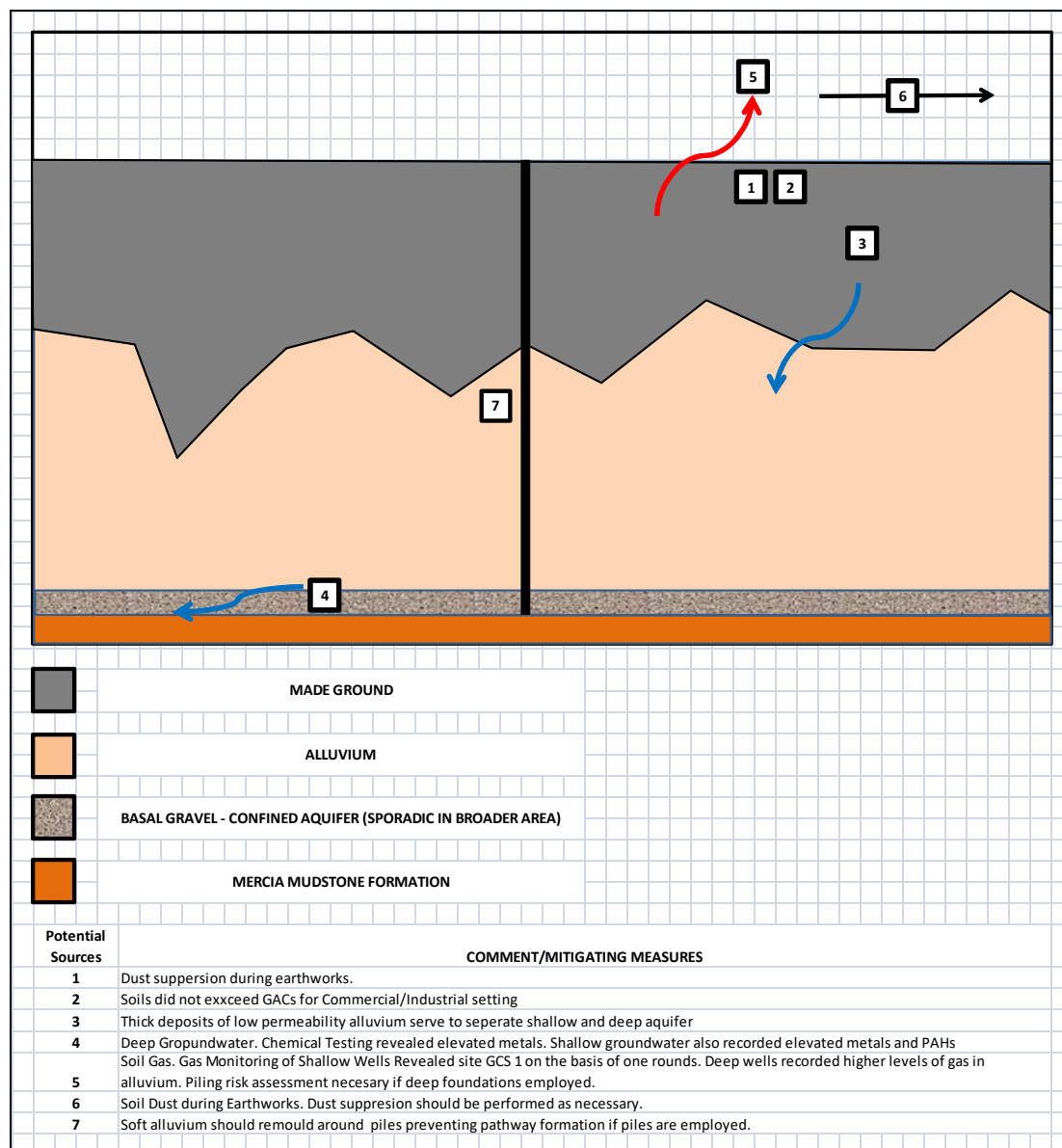


Figure 6.1. Site Conceptual Model (note: Not to Scale)

SECTION 7 Engineering Recommendations

It is understood that the proposed Aggregate Area will contain mobile plant and does not, therefore, require permanent foundation. If the proposal changes the design of this area can be reappraised.

It is understood that permanent structures are required in the proposed Asphalt Plant Area. The final foundation solution for this area will depend on the foundation loads and acceptable settlements.

7.1 Preparation of Site

Exposed foundation excavations should be inspected by a Geotechnical Engineer to confirm the absence of soft spots. If identified, soft spots should be excavated out and the excavation backfilled in an engineered fashion using a suitable granular aggregate placed at optimum moisture content in accordance with Series 600 of the Specification for Highway Works.

Contingencies should be made for the protection/diversion of any underground services present beneath the site brought about as a result of the proposed works.

Contingencies should also be made for the protection and any necessary temporary/permanent support of structures adjacent to the site.

Any reduced levels should be brought up to the required levels with well compacted imported granular materials. Department of Transport (DoT) Type 2 sub-base or similar may be used and should be compacted in layers, in accordance with the Specification for Highway Works.

All materials to be removed from site should be taken to an appropriately licensed landfill facility. In accordance with EC Regulation 1272/2008 and Environment Agency Guidance WM3 (v. 1.1/2018) soils and other materials destined for off-site disposal should be classified on the basis of their hazard phrases prior to disposal.

7.2 Foundation and Floor Slab Solution

Ground Investigations have encountered a very dense horizon of made ground over a thick deposit of alluvium. The alluvium in the region is generally soft to very soft silt/clay.

Pad Foundations may be employed if pads are limited to a dimension of 2.5m x 2.5m and foundation loads can be kept below 50 kN/m² and differential settlement of 25mm between adjacent pads can be tolerated. Under such circumstances the pads could be placed within the dense made ground fill. The existing fill should be excavated to a depth 1.0m below the base of the pad, and extend below the concrete hardstanding, to ensure the absence of hard spots beneath the pad. This should be backfilled with Type 1 Aggregate to the base of the pad, placed at Optimum Moisture Content in thin compacted layers in accordance Series 600 of the Specification for Highway Works.

If larger foundation loads or lower settlement characteristics are required, foundation loads should be transferred to competent horizons within the Mercia Mudstone Group using piles.

7.2 Foundation and Floor Slab Solution

Hollow round section steel piles driven to a suitable set would be expected to perform satisfactorily with loads of 400kN per pile, at which intensity total settlement should not exceed 10mm and differential settlement between adjacent piles should not exceed half this value. The nominated piling contractor should confirm the final design and performance of the piles. Due to the presence of concrete, dense made ground deposits and potential buried obstructions beneath the site, piles are likely to require pre-bored holes through the made ground.

Vibrations should be monitored during piling and if vibrations cannot be kept within limits consideration should be given to deeper pre-drilling or end-driven piles.

During a site visit it was suggested that the site may be raised using site-won aggregate. If the site is raised this will constitute an additional load and a change in the ground stress regime. If the additional load is spread over a broad area the stress will not decay sufficiently within the made ground horizon and will result in settlement from the alluvium.

Secondary settlement of alluvium can be a protracted process and monitoring can be implemented to prove when the process has ceased. If shallow foundations are installed prior to the cessation of secondary settlement in the alluvium the settlements on the foundation may exceed those stated above. If piles are installed prior to infilling the change in stress regime could result in increased skin friction on the piles.

All foundation formations should be inspected by a suitably qualified Engineer before pouring. The piling contractor may request additional site specific testing/boreholes to confirm the piling design.

7.3 Excavations and Formations

Due to the presence of concrete and the density of the made ground breakers will be necessary for excavation at the site. Buried obstructions may be encountered within the made ground and provision should be made for the use of a breaker to deal with such obstructions.

The sides of any excavations deeper than 1.0m should be supported by planking and strutting or other proprietary means.

The sub-formations/formations will be susceptible to loosening, softening and deterioration by exposure to weather (rain, frost and drying conditions), the action of water (flood water or removal of groundwater) and site traffic.

Formations should never be left unprotected and continuously exposed to rain causing degradation, or left exposed/uncovered overnight, unless permitted by a qualified engineer. All formations should be inspected by a suitably qualified engineer before pouring.

Construction plant and other vehicular traffic should not be operated on unprotected formations. Allowances should be made for special precautions to prevent formation deterioration in addition to the above.

7.4 Foundation Risk Assessment

If piling is proposed at the site a Foundation Risk Assessment should be prepared as a separate document and submitted to Natural Resources Wales prior to the works.

The soft alluvial clays should remould around the round section piles, thus maintaining the current status quo in respect to hydrological protection. This should be confirmed by groundwater monitoring during and after the piling works.

Gas monitoring should also be performed during and after the piling operations to confirm that the piling has not affected the gas regime.

If hollow piles are employed any void space in the centre of the pile should be backfilled with a bentonite cement to achieve a hydrological seal.

7.5 Protection of Buried Concrete

Total Sulphate ranged from 3600 mg/kg to 5400 mg/kg and pH values ranged from 9.8 to 11.6. With reference to Table C2 of BRE Special Digest SD1 the site falls into Aggressive Chemical Environment for Concrete (ACEC) Design Sulphate Class AC-1s.

Sulphate analysis of the made ground at the adjacent CELSA Development Site placed the site within Design Sulphate Class AC-1s.

Chemical Test Results are presented in **Annex E**.

7.6 Sustainable Drainage

In April 2019 HARCO performed three soakage tests on the southern boundary of the study site. The tests were performed in a trial pit measuring 4.5m long, 2.2m wide and 2.0m deep (i.e. within the made ground). The made ground was seen to be predominantly granular.

During the tests up to 2670 litres of water cleared from the pits in less than 9 minutes.

The data from the soakage tests was assessed using the equations of BRE 365. Soil infiltration rates of between $2.98 \times 10^{-3} \text{ ms}^{-1}$ and $4.4 \times 10^{-4} \text{ ms}^{-1}$ were calculated. We would recommend using the lowest rate for design purposes.

7.7 Soil Waste Classification

3 No. samples of made ground soil were subject to Waste Classification.

On the basis of the soil chemical test results, the soil was classified based on the identified hazard phrases as defined in accordance with waste classification algorithms detailed in Environment Agency publication WM3 (V.1.1., 2018).

Representative compounds were selected for the detected elements for waste classification. Where necessary, appropriate factors were employed to account for differences between elemental and molecular weight.

Total Petroleum Hydrocarbons (TPH) were detected in all samples during TPHCWG analysis, up to a concentration of 2,000 mg/kg. The potential for HP 3(i) was triggered on account of this although Terra Firma Wales Ltd does not expect this hazard to be realised as free product was not noted during the investigation.

Asbestos was not detected during screening.

A summary of the soil classification is presented in **Table 7.1**.

Table 7.1 Summary of Classification					
Sample Location	Depth (m)		Waste Classification	EWC Code	Additional Comments
BH01	0.5 – 1.5		Non-Hazardous	17 05 04	
BH02	0.5 – 1.5		Hazardous	17 05 03*	HP8 on account of elevated pH
BH03	0.5 – 1.5		Non-Hazardous	17 05 04	

3 No. samples were also submitted for WAC analysis. An appraisal of the WAC results is presented in **Table 7.2**. The Hazwaste report is presented in **Annex G**.

Table 7.2 Summary of WAC Testing		
Location	Depth	Comments
BH01	0.5 – 1.5	Fails Inert Criteria on account of elevated TPH, fluoride, sulphate and Total Dissolved Solids
BH02	0.5 – 1.5	Satisfies Stable Non-Reactive Hazardous Waste Criteria
BH03	0.5 – 1.5	Fails Inert Criteria on account of elevated TPH, fluoride and sulphate

* Sample classified as Hazardous during Total Analysis (i.e. Table 7.1) cannot be classified as Inert on account of WAC Results alone.

Due to the variation in classifications, we would recommend further testing of arisings following excavation to allow waste to be segregated and minimise the amount classified as Hazardous.

The current classification does not include an assessment of invasive plant species. If anomalous materials are encountered during excavation the classification should be revisited.

ANNEX A
Envirocheck Report

Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

197133902_1_1

Customer Reference:

15264-DE

National Grid Reference:

321460, 176300

Slice:

A

Site Area (Ha):

0.01

Search Buffer (m):

1000

Site Details:

Site at 321450, 176300

Client Details:

Mr D Emanuel
Terra Firma (Wales) Ltd
5 Deryn Court
Wharfdale Road
Pentwyn
Cardiff
CF23 7HB

Report Section	Page Number
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Waste	15
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Introduction

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

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Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1				10
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices	pg 3				1
Integrated Pollution Controls	pg 4				12
Integrated Pollution Prevention And Control	pg 5		1	4	10
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 9			2	7
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 10			Yes	
Pollution Incidents to Controlled Waters	pg 10			2	1
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 11		1		
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 11				3
Water Abstractions	pg 12		3		2 (*2)
Water Industry Act Referrals	pg 13			1	
Groundwater Vulnerability	pg 13	Yes	n/a	n/a	n/a
Drift Deposits			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 13	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 13	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences	pg 14		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 14		Yes	n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 14			2	4

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites	pg 15	1			
Historical Landfill Sites	pg 15	1	4	3	5
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 17		2	2	15
Local Authority Landfill Coverage	pg 22	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 22			1	1
Potentially Infilled Land (Water)	pg 22	1	3	13	46
Registered Landfill Sites	pg 25		2	3	4
Registered Waste Transfer Sites	pg 28		2		4
Registered Waste Treatment or Disposal Sites	pg 31		2	1	2
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)	pg 34				1
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)	pg 34			1	
Planning Hazardous Substance Consents	pg 34				2
Planning Hazardous Substance Enforcements					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 35	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 35	Yes			Yes
BGS Recorded Mineral Sites	pg 35				1
BGS Urban Soil Chemistry	pg 35			Yes	Yes
BGS Urban Soil Chemistry Averages	pg 37	Yes			
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards				n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 37	Yes	Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 37	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 37	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 37	Yes		n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 39		2	4	71
Fuel Station Entries	pg 45				1
Points of Interest - Commercial Services	pg 45		7		36
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 49		12	23	67
Points of Interest - Public Infrastructure	pg 58		2	1	5
Points of Interest - Recreational and Environmental	pg 58				3
Gas Pipelines					
Underground Electrical Cables					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites	pg 59			1	
Sites of Special Scientific Interest	pg 59			1	
Special Areas of Conservation	pg 59			1	
Special Protection Areas	pg 59			1	
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	0	1	321461 176298
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (E)	40	1	321500 176298
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (W)	61	1	321400 176300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	98	1	321461 176200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	102	1	321550 176250
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	116	1	321400 176200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NW (NW)	123	1	321350 176350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (W)	161	1	321300 176298
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	189	1	321300 176200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NE (S)	448	1	321461 175850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (NE)	455	1	321800 176600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A19SW (NE)	490	1	321800 176650
1	Discharge Consents Operator: John Laing Construction Ltd Property Type: Water Treatment Works Location: Project Offices Construction Site O, Construction Site Of Cardiff Wwt, Wwtw Cardiff Authority: Natural Resources Wales Catchment Area: Boundary Of HA 57 & HA 58 Reference: AN027740101 Permit Version: 1 Effective Date: 22nd September 1997 Issued Date: 22nd September 1997 Revocation Date: 24th June 2002 Discharge Type: Unspecified Discharge Environment: Not Supplied Receiving Water: Underground Strata Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m	A7NE (SW)	537	2	321100 175900
2	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Stations Location: Cardiff Eastern District, Pumping Station Short Outfall, Rover Way, Cardiff Authority: Natural Resources Wales Catchment Area: SEVERN LOWER Reference: An0308601 Permit Version: 1 Effective Date: 26th March 2002 Issued Date: 26th March 2002 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Saline Estuary Receiving Water: Severn Estuary Status: Effective Positional Accuracy: Located by supplier to within 10m	A14NW (NE)	551	2	321950 176550

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Staions Location: Cardiff Eastern District, Pumping Station Short Outfall, Rover Way, Cardiff Authority: Natural Resources Wales Catchment Area: SEVERN LOWER Reference: An0308601 Permit Version: 1 Effective Date: 26th March 2002 Issued Date: 26th March 2002 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge: Saline Estuary Environment: Receiving Water: Severn Estuary Status: Effective Positional Accuracy: Located by supplier to within 10m	A14NW (NE)	551	2	321950 176550
3	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Station - Water Company Location: Cardiff Eastern Ps Sso Authority: Natural Resources Wales Catchment Area: River Rhymney Reference: AN0045002 Permit Version: 2 Effective Date: 1st January 1991 Issued Date: 1st January 1991 Revocation Date: 28th March 2002 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Rhymney Estuary Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m	A14NW (E)	658	2	322100 176450
3	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Station - Water Company Location: Cardiff Eastern Ps Sso Authority: Natural Resources Wales Catchment Area: River Rhymney Reference: An0045002 Permit Version: 1 Effective Date: 1st January 1990 Issued Date: 1st January 1990 Revocation Date: 31st December 1990 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Rhymney Estuary Status: Authorisation revoked Positional Accuracy: Located by supplier to within 10m	A14NW (E)	658	2	322100 176450
4	Discharge Consents Operator: Hyder Consulting Ltd Property Type: General Construction Work Location: Cardiff Wastewater Trtmnt Plnt Tide, Tide Fields Road Cardiff Authority: Natural Resources Wales Catchment Area: Boundary Of HA 57 & HA 58 Reference: AN027770101 Permit Version: 1 Effective Date: 13th November 1997 Issued Date: 13th November 1997 Revocation Date: 13th November 2000 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: Severn Estuary Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Positional Accuracy: Located by supplier to within 100m	A8SW (S)	860	2	321230 175470

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	Discharge Consents Operator: Byzak Contractors Ltd Property Type: Undefined Or Other Location: Treatment Area 'A' Rover Way Cardi, Rover Way Cardiff Authority: Natural Resources Wales Catchment Area: River Rhymney Reference: An0273901 Permit Version: 2 Effective Date: 31st July 1997 Issued Date: 30th July 1997 Revocation Date: 14th October 1997 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Rhymney Estuary Status: Consent expired Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	893	2	322070 176950
5	Discharge Consents Operator: Byzak Contractors Ltd Property Type: Undefined Or Other Location: Treatment Area 'A' Rover Way Cardi, Rover Way Cardiff Authority: Natural Resources Wales Catchment Area: River Rhymney Reference: An0273901 Permit Version: 1 Effective Date: 18th June 1997 Issued Date: 18th June 1997 Revocation Date: 30th July 1997 Discharge Type: Unspecified Discharge: Not Supplied Environment: Receiving Water: River Rhymney Estuary Status: Authorisation revoked Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	893	2	322070 176950
6	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Staions Location: Cardiff Central Sps Tremorfa, Cardiff, Cardiff Cbc Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: An0306101 Permit Version: 1 Effective Date: 21st March 2001 Issued Date: 21st March 2001 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge: Saline Estuary Environment: Receiving Water: Severn Estuary Status: Effective Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	976	2	320900 175500
6	Discharge Consents Operator: Dwr Cymru Cyfyngedig Property Type: Sewerage Network - Pumping Staions Location: Cardiff Central Sps Tremorfa, Cardiff, Cardiff Cbc Authority: Natural Resources Wales Catchment Area: Not Supplied Reference: An0306101 Permit Version: 1 Effective Date: 21st March 2001 Issued Date: 21st March 2001 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge: Saline Estuary Environment: Receiving Water: Severn Estuary Status: Effective Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	976	2	320900 175500
7	Enforcement and Prohibition Notices Location: Tremorfa Steel Works, CARDIFF, South Glamorgan, CF2 2YX Permit Reference: Not Given Enforcement Date: 18th January 1996 Details: Press Release HM360, Release of primary fume to the atmosphere due to a failure in the fume extraction system under EPA90 Positional Accuracy: Unknown	A12NW (W)	762	3	320705 176395

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	Integrated Pollution Controls Name: Celsa Manufacturing (Uk) Ltd Location: Cardiff Rod and Bar Mill, Castle Works, CARDIFF, SOUTH GLAMORGAN, CF24 5XQ Authority: Environment Agency, Welsh Region Permit Reference: BG4879 Dated: 31st August 1999 Process Type: IPC minor (non-substantial) variation to previous variation Description: 1.3 A (A) Combustion processes within the Fuel & Power Industry Status: Revoked - Now IPPC Positional Accuracy: Automatically positioned to the address	A12NE (W)	523	3	320938 176317
8	Integrated Pollution Controls Name: Celsa Manufacturing (Uk) Ltd Location: Cardiff Rod and Bar Mill, Castle Works, CARDIFF, South Glamorgan, CF24 5XQ Authority: Environment Agency, Welsh Region Permit Reference: BC5393 Dated: 24th November 1998 Process Type: IPC minor (non-substantial) variation to previous variation Description: 1.3 A (A) Combustion processes within the Fuel & Power Industry Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Automatically positioned to the address	A12NE (W)	528	3	320933 176317
8	Integrated Pollution Controls Name: Celsa Manufacturing (Uk) Ltd Location: Cardiff Rod and Bar Mill, P O Box 83, Castle Works, CARDIFF, South Glamorgan, CF24 5XQ Authority: Environment Agency, Welsh Region Permit Reference: AF7932 Dated: 28th October 1992 Process Type: IPC new application Description: 1.3 A (A) Combustion processes within the Fuel & Power Industry Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Automatically positioned to the address	A12NE (W)	529	3	320933 176322
9	Integrated Pollution Controls Name: Celsa Manufacturing (Uk) Ltd Location: Po Box 37 Tremorfa Works, CARDIFF, Cardiff, CF2 2YX Authority: Environment Agency, Welsh Region Permit Reference: BD9831 Dated: 24th November 1998 Process Type: IPC minor (non-substantial) variation to previous variation Description: 2.2 A (I) Non-ferrous Metal processes within the Metal Industry Status: Authorisation revoked Positional Accuracy: Manually positioned within the geographical locality	A12NE (W)	609	3	320859 176387
9	Integrated Pollution Controls Name: Celsa Manufacturing (Uk) Ltd Location: Cardiff Medium Section Mill, Po Box 16, Tremorfa Works, CARDIFF, South Glamorgan, CF2 2YW Authority: Environment Agency, Welsh Region Permit Reference: BC5474 Dated: 24th November 1998 Process Type: IPC minor (non-substantial) variation to previous variation Description: 1.3 A (A) Combustion processes within the Fuel & Power Industry Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned within the geographical locality	A12NE (W)	609	3	320859 176392
9	Integrated Pollution Controls Name: Celsa Manufacturing (Uk) Ltd Location: Cardiff Medium Section Mill, P O Box 16 Tremorfa Works, Seawall Road, CARDIFF, South Glamorgan, CF2 2YW Authority: Environment Agency, Welsh Region Permit Reference: BG4852 Dated: 31st August 1999 Process Type: IPC minor (non-substantial) variation to previous variation Description: 1.3 A (A) Combustion processes within the Fuel & Power Industry Status: Revoked - Now IPPC Positional Accuracy: Manually positioned within the geographical locality	A12NE (W)	610	3	320859 176397
9	Integrated Pollution Controls Name: Celsa Manufacturing (Uk) Ltd Location: P O Box 37, Tremorfa Works, CARDIFF, South Glamorgan, CF2 2TH Authority: Environment Agency, Welsh Region Permit Reference: AY8727 Dated: 21st October 1997 Process Type: IPC new application Description: 2.2 A (I) Non-ferrous Metal processes within the Metal Industry Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned within the geographical locality	A12NE (W)	614	3	320854 176387

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	Integrated Pollution Controls Name: Celsa Manufacturing (Uk) Ltd Location: Cardiff Medium Section Mill, P O Box 16 Tremorfa Works, Seawall Road, CARDIFF, South Glamorgan, CF2 2YW Authority: Environment Agency, Welsh Region Permit Reference: AF8688 Dated: 28th October 1992 Process Type: IPC new application Description: 1.3 A (A) Combustion processes within the Fuel & Power Industry Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned within the geographical locality	A12NE (W)	614	3	320854 176392
9	Integrated Pollution Controls Name: Celsa Manufacturing (Uk) Ltd Location: P O Box 37, Tremorfa Works, CARDIFF, CF2 2YX Authority: Environment Agency, Welsh Region Permit Reference: AR0322 Dated: 29th July 1995 Process Type: IPC application for process that was regulated by HMIP for air releases under previous legislation Description: 2.1 A (A) Iron and Steel processes within the Metal Industry Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned within the geographical locality	A12NE (W)	615	3	320854 176397
9	Integrated Pollution Controls Name: Celsa Manufacturing (Uk) Ltd Location: P O Box 37, Tremorfa Works, CARDIFF, CF2 2YX Authority: Environment Agency, Welsh Region Permit Reference: BH4378 Dated: 28th February 2000 Process Type: IPC minor (non-substantial) variation to previous variation Description: 2.1 A (A) Iron and Steel processes within the Metal Industry Status: Revoked - Now IPPC Positional Accuracy: Manually positioned within the geographical locality	A12NE (W)	619	3	320849 176387
9	Integrated Pollution Controls Name: Celsa Manufacturing (Uk) Ltd Location: P O Box 37, Tremorfa Works, CARDIFF, CF2 2YX Authority: Environment Agency, Welsh Region Permit Reference: BE4991 Dated: 24th November 1998 Process Type: IPC minor (non-substantial) variation to previous variation Description: 2.1 A (A) Iron and Steel processes within the Metal Industry Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned within the geographical locality	A12NE (W)	619	3	320849 176392
9	Integrated Pollution Controls Name: Celsa Manufacturing (Uk) Ltd Location: P O Box 37, Tremorfa Works, CARDIFF, Mid Glamorgan, CF2 2YX Authority: Environment Agency, Welsh Region Permit Reference: BB4430 Dated: 6th August 1998 Process Type: IPC minor (non-substantial) variation to previous variation Description: 2.1 A (A) Iron and Steel processes within the Metal Industry Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned within the geographical locality	A12NE (W)	620	3	320849 176397
10	Integrated Pollution Prevention And Control Name: Celsa Manufacturing Uk Ltd Location: Tremorfa Steel Works, Melt Shop, Tremorfa Works, Seawall Road, Tremorfa,, Cardiff, South Wales, CF24 5YX Authority: Natural Resources Wales Permit Reference: BP3237FK Original Permit Ref: BI9372iu Effective Date: 22nd April 2012 Status: Superseded By Variation Application Type: Variation App. Sub Type: Standard Positional Accuracy: Located by supplier to within 100m Activity Code: 2.1 A(1) (B) Activity Description: Ferrous Metals; Producing, Melting Or Refining Primary Activity: Y	A13NW (NW)	236	2	321340 176500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	Integrated Pollution Prevention And Control Name: Celsa Manufacturing Uk Ltd Location: Tremorfa Melt Shop Ea/Epr/Tp3639bh/V002, New Melt Shop, Tremorfa Works, Seawall Road, Tremorfa., Cardiff, South Wales, CF24 5TH Authority: Natural Resources Wales Permit Reference: BP3537FN Original Permit Ref: Tp3639bh Effective Date: 24th April 2012 Status: Effective Application Type: Variation App. Sub Type: Standard Positional Accuracy: Located by supplier to within 100m Activity Code: 2.1 A(1) (B) Activity Description: Ferrous Metals; Producing, Melting Or Refining Primary Activity: Y	A13NW (W)	261	2	321200 176300
12	Integrated Pollution Prevention And Control Name: Dwr Cymru Cyfyngedig (Welsh Water) Location: Cardiff Chp Facility Epr/Fp3232kg/V002, Dwr Cymru Cyfyngedig, Cardiff East Wastewater Treatment Works, Tide Fields Road, Rover Way, Tremorfa, CARDIFF, South Glamorgan, CF24 2RX Authority: Environment Agency, Welsh Region Permit Reference: DP3330ZA Original Permit Ref: Fp3232kg Effective Date: Not Supplied Status: Valid Application Type: Variation App. Sub Type: Simple Standard Variation Positional Accuracy: Automatically positioned to the address Activity Code: 1.1 A(1) (B) (I) Activity Description: Combustion; Recovered Oil Greater Or Equal To 3Mw But Less Than 50Mw Primary Activity: Y	A8NW (S)	396	3	321421 175905
13	Integrated Pollution Prevention And Control Name: Allied Steel And Wire Ltd Location: Cardiff Medium Section Mill, Tremorfa Works, Seawall Road, Cardiff, Cf24 2yw Authority: Environment Agency, Welsh Region Permit Reference: Bs9636 Original Permit Ref: Bs9636 Effective Date: Not Supplied Status: Valid Application Type: Not Supplied App. Sub Type: Not Supplied Positional Accuracy: Manually positioned to the address or location Activity Code: 2.1 A(1) (C) Activity Description: Ferrous Metals; Hot Rolling Greater Than 20T/Hr Primary Activity: Not Supplied	A12NE (W)	400	3	321073 176393
14	Integrated Pollution Prevention And Control Name: Tremorfa Anaerobic Digestion Facility Location: Tide Fields Road, Tremorfa, Cardiff, CF24 5SB Authority: Natural Resources Wales Permit Reference: AB3093CA Original Permit Ref: Not Supplied Effective Date: 25th January 2016 Status: Effective Application Type: Bespoke App. Sub Type: Not Supplied Positional Accuracy: Located by supplier to within 10m Activity Code: 5.4 A(1) b) (i) Activity Description: Not Supplied Primary Activity: Y Activity Code: 0.0 Associated Process Activity Description: Not Supplied Primary Activity: N	A12SE (SW)	458	2	321116 175997

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	Integrated Pollution Prevention And Control Name: Tremorfa Melt Shop Location: Tremorfa Works New Melt Shop Seawall Road, Tremorfa, Cardiff, South Wales, CF24 5TH Authority: Natural Resources Wales Permit Reference: Tp3639bh Original Permit Ref: Bp3537fn Effective Date: 20th June 2017 Status: Effective Application Type: Bespoke App. Sub Type: Not Supplied Positional Accuracy: Automatically positioned to the address Activity Code: 2.1 A(1) (B) Activity Description: Not Supplied Primary Activity: Y Activity Code: 5.4 PART A (1) B) (III) Activity Description: Not Supplied Primary Activity: N	A12NE (W)	509	2	320954 176343
15	Integrated Pollution Prevention And Control Name: Carrington Wire Ltd Location: Pengam Wire Works, Po Box 56, Pengam Works, Tremorfa,, Cardiff, South Wales, CF24 2WR Authority: Natural Resources Wales Permit Reference: MP3934XY Original Permit Ref: Bx9447in Effective Date: 9th July 2008 Status: Surrender Effective Application Type: Surrender App. Sub Type: Whole Positional Accuracy: Manually positioned to the address or location Activity Code: 2.3 A(1) (A) Activity Description: Surface Treating Metals And Plastics; Electrolytic/Chemical Greater Than 30 Cubic Metres Primary Activity: Y Activity Code: 0.0 Associated Process Activity Description: Associated Process Primary Activity: N	A12NE (W)	516	2	320949 176359
16	Integrated Pollution Prevention And Control Name: Unit 11 Location: Unit 11, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Authority: Natural Resources Wales Permit Reference: Pp3739bk Original Permit Ref: Not Supplied Effective Date: 21st October 2015 Status: Effective Application Type: Bespoke App. Sub Type: Not Supplied Positional Accuracy: Automatically positioned to the address Activity Code: 5.3 PART A (1) A) (IV) Activity Description: Not Supplied Primary Activity: Y	A8NW (SW)	542	2	321250 175799
16	Integrated Pollution Prevention And Control Name: Silverdell (Uk) Ltd Location: Martin Road Hazardous Waste Transfer Station Ea/Epr/Pp3739bk/V002, Martin Road,Unit 11, Tremorfa Industrial Estate,Tremorfa,, Cardiff, South Wales, CF24 5SD Authority: Natural Resources Wales Permit Reference: EP3831ZG Original Permit Ref: Pp3739bk Effective Date: 25th March 2013 Status: Superseded By Variation Application Type: Variation App. Sub Type: Minor Positional Accuracy: Automatically positioned to the address Activity Code: 5.3 A(1) a) (iv) Activity Description: DISPOSAL OR RECOVERY OF HAZ WASTE WITH CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING REPACKAGING PRIOR TO SUBMISSION TO ANY OF THE OTHER ACTIVITIES LISTED IN THIS SECTION OR IN SECTION 5.1 Primary Activity: Y	A8NW (SW)	542	2	321250 175799

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	Integrated Pollution Prevention And Control Name: Euro Dismantling Services Ltd Location: Martin Road Hazardous Waste Transfer Station Ea/Epr/Pp3739bk/V002, Martin Road, Unit 11, Tremorfa Industrial Estate, Tremorfa., Cardiff, South Wales, CF24 5SD Authority: Natural Resources Wales Permit Reference: MP3135EC Original Permit Ref: Mp3135ec Effective Date: 15th November 2013 Status: Effective Application Type: Transfer App. Sub Type: Whole with Fit and Proper Person Positional Accuracy: Located by supplier to within 10m Activity Code: 5.3 A(1) a) (iv) Activity Description: DISPOSAL OR RECOVERY OF HAZ WASTE WITH CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING REPACKAGING PRIOR TO SUBMISSION TO ANY OF THE OTHER ACTIVITIES LISTED IN THIS SECTION OR IN SECTION 5.1 Primary Activity: Y	A8NW (S)	550	2	321250 175790
17	Integrated Pollution Prevention And Control Name: Dwr Cymru Cyfyngedig (Welsh Water) Location: Cardiff East Wastewater Treatment Works Ea/Epr/Fp3232kg/A001, Cardiff East Wwtw, Martin Road, Tremorfa Ind. Estate, Tremorfa., Cardiff, CF24 5SD Authority: Natural Resources Wales Permit Reference: FP3232KG Original Permit Ref: Fp3232kg Effective Date: 26th May 2010 Status: Superseded By Variation Application Type: Application App. Sub Type: New Positional Accuracy: Located by supplier to within 10m Activity Code: 1.1 A(1) (B) (I) Activity Description: Combustion; Recovered Oil Greater Or Equal To 3Mw But Less Than 50Mw Primary Activity: Y	A8NW (S)	551	2	321410 175750
18	Integrated Pollution Prevention And Control Name: Celsa Manufacturing Uk Ltd Location: Tremorfa Steel Works, Melt Shop, Tremorfa Works, Seawall Road, Tremorfa, Cardiff, South Wales, CF24 5YX Authority: Natural Resources Wales Permit Reference: Bu2098ip Original Permit Ref: Bl9372iu Effective Date: 20th June 2003 Status: Superseded By Variation Application Type: Transfer App. Sub Type: Whole without Fit and Proper Person Positional Accuracy: Manually positioned to the road within the address or location Activity Code: 2.1 A(1) (B) Activity Description: Ferrous Metals; Producing, Melting Or Refining Primary Activity: Y	A12NE (W)	587	2	320886 176414
19	Integrated Pollution Prevention And Control Name: Celsa Manufacturing Uk Ltd Location: Cardiff Section Mill, Section Mill, Tremorfa Works, Seawall Road, Cardiff, CF24 5TH Authority: Natural Resources Wales Permit Reference: Bv0767it Original Permit Ref: Bv0767it Effective Date: 28th November 2003 Status: Effective Application Type: Application App. Sub Type: New Positional Accuracy: Manually positioned to the address or location Activity Code: 1.1 B (A) Activity Description: Combustion; Any Fuel Greater Or Equal To 20Mw But Less Than 50Mw (Unless 1.1 A(1) B) Primary Activity: N Activity Code: 2.1 A(1) (C) Activity Description: Ferrous Metals; Hot Rolling Greater Than 20T/Hr Primary Activity: Y	A12SE (W)	629	2	320834 176244

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	Integrated Pollution Prevention And Control Name: Carrington Wire Ltd Location: Po Box 56, Pengam Wire Works, Tremorfa, Cardiff, South Wales, CF24 2WR Authority: Natural Resources Wales Permit Reference: Bx9447in Original Permit Ref: Bx9447in Effective Date: 1st March 2005 Status: Superseded By Variation Application Type: Application App. Sub Type: New Positional Accuracy: Manually positioned to the address or location Activity Code: 0.0 Associated Process Activity Description: Associated Process Primary Activity: N Activity Code: 2.3 A(1) (A) Activity Description: Surface Treating Metals And Plastics; Electrolytic/Chemical Greater Than 30 Cubic Metres Primary Activity: Y	A12NW (W)	712	2	320759 176417
21	Integrated Pollution Prevention And Control Name: Celsa Manufacturing (Uk) Ltd Location: Po Box 37, Tremorfa Works, Seawall Road, Cardiff, Cf2 2yx Authority: Environment Agency, Welsh Region Permit Reference: Bl9372 Original Permit Ref: Bl9372 Effective Date: 7th January 2003 Status: Superseded By Variation Application Type: PPC APPLICATION App. Sub Type: Not Supplied Positional Accuracy: Manually positioned to the address or location Activity Code: 2.1 A(1) (B) Activity Description: Ferrous Metals; Producing, Melting Or Refining Primary Activity: Not Supplied	A12SW (W)	773	3	320688 176297
22	Local Authority Pollution Prevention and Controls Name: Celsa Manufacturing (Uk) LtdCardiff Mill Services Location: Rover Way, CARDIFF, South Glamorgan, CF24 5UX Authority: Cardiff Council, Pollution Control Division Permit Reference: Ppc/27/3.5 Dated: 6th August 1992 Process Type: Local Authority Pollution Prevention and Control Description: PG3/8 Quarry processes including roadstone plants and the size reduction of bricks, tiles and concrete Status: Permitted Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	334	4	321188 176105
23	Local Authority Pollution Prevention and Controls Name: Castle Nails Location: PO Box 4, Tremorfa Nail Works, CARDIFF, South Glamorgan, CF24 5YS Authority: Cardiff Council, Pollution Control Division Permit Reference: Epa90/20/2.2 Dated: 14th April 1993 Process Type: Local Authority Air Pollution Control Description: PG2/2 Hot dip galvanising processes Status: Authorisation revoked Positional Accuracy: Manually positioned to the address or location	A12SE (W)	490	4	321005 176118
24	Local Authority Pollution Prevention and Controls Name: National Engine Centre Location: Unit 16c Martin Road, Tremorfa Industrial Estate, Cardiff, CF24 5SD Authority: Cardiff Council, Pollution Control Division Permit Reference: EPR 152/1.1 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG1/1Waste oil burners, less than 0.4MW net rated thermal input Status: Permitted Positional Accuracy: Manually positioned to the address or location	A8NW (SW)	504	4	321209 175862
25	Local Authority Pollution Prevention and Controls Name: Castle Wire Location: PO Box 48, Castle Works, CARDIFF, South Glamorgan, CF10 1XQ Authority: Cardiff Council, Pollution Control Division Permit Reference: Epa90/19/2.2 Dated: 14th April 1993 Process Type: Local Authority Air Pollution Control Description: PG2/2 Hot dip galvanising processes Status: Authorisation revoked Positional Accuracy: Manually positioned to the address or location	A12SE (SW)	528	4	320991 176057

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
26	Local Authority Pollution Prevention and Controls Name: Diggers Vehicle Dismantlers Location: Unit 15 Tremorfa Industrial Estate, Tremorfa, CARDIFF, Mid Glamorgan, CF2 2SD Authority: Cardiff Council, Pollution Control Division Permit Reference: Epa90/116/2.2 Dated: 21st September 2001 Process Type: Local Authority Air Pollution Control Description: PG2/1Furnaces for the extraction of non-ferrous metal from scrap Status: Authorised Positional Accuracy: Manually positioned to the address or location	A8NW (SW)	577	4	321162 175805
27	Local Authority Pollution Prevention and Controls Name: Hope Ready Mixed Concrete Location: Cardiff Wharf, Roath Dock Road, Cardiff, CF10 4ED Authority: Cardiff Council, Pollution Control Division Permit Reference: Ppc/15/3.1 Dated: 18th November 1992 Process Type: Local Authority Pollution Prevention and Control Description: PG3/1Blending, packing, loading and use of bulk cement Status: Permitted Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	586	4	321052 175879
28	Local Authority Pollution Prevention and Controls Name: Tilcon Ltd Location: Rover Way, The Docks, CARDIFF, South Glamorgan, CF24 2RX Authority: Cardiff Council, Pollution Control Division Permit Reference: epa90/12/3.1 Dated: 28th August 1992 Process Type: Local Authority Air Pollution Control Description: PG3/1Blending, packing, loading and use of bulk cement Status: Authorisation has varied Positional Accuracy: Manually positioned to the road within the address or location	A7NE (SW)	645	4	320990 175857
29	Local Authority Pollution Prevention and Controls Name: Action Environmental Location: Unit 5 Martin Road, Tremorfa Industrial Estate, Cardiff, Cf24 5sd Authority: Cardiff Council, Pollution Control Division Permit Reference: PPC/121/3.5 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG3/16 Mobile screening and crushing processes Status: Permitted Positional Accuracy: Manually positioned to the address or location	A7NE (SW)	728	4	320979 175753
30	Local Authority Pollution Prevention and Controls Name: Tesco Petrol Filling Station Location: Eastern Bay Road, Pengam Green, CARDIFF, CF24 2HN Authority: Cardiff Council, Pollution Control Division Permit Reference: PPC/114/1.2 Dated: 12th February 2001 Process Type: Local Authority Pollution Prevention and Control Description: PG1/14 Petrol filling station Status: Permitted Positional Accuracy: Manually positioned to the address or location	A18NE (N)	955	4	321623 177239
	Nearest Surface Water Feature	A13SE (SE)	328	-	321667 176043
31	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Seawall Road, TREMORFA Authority: Environment Agency, Welsh Region Pollutant: Mud/Clay/Soil Note: Not Supplied Incident Date: 23rd April 1996 Incident Reference: 28126 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SW (N)	433	3	321300 176700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
32	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Rover Way Foreshore Authority: Environment Agency, Welsh Region Pollutant: Crude Sewage Note: Severn Est; Effluent Quality Incident Date: 4th August 1997 Incident Reference: 33549 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Weather Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14SW (E)	443	3	321900 176250
33	Pollution Incidents to Controlled Waters Property Type: Not Given Location: A Plant Units, 4 5 And 6, Eastmoors Road Authority: Environment Agency, Welsh Region Pollutant: Algae Note: Not Supplied Incident Date: 6th September 1995 Incident Reference: 25773 Catchment Area: Not Given Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SW (N)	528	3	321300 176800
	River Quality Name: Not Supplied GQA Grade: Unclassified Tidal River Reach: Not Supplied Estimated Distance (km): Not Supplied Flow Rate: Not Supplied Flow Type: Not Supplied Year: 1995	A13SW (W)	48	3	321416 176280
34	Substantiated Pollution Incident Register Authority: Natural Resources Wales Incident Date: 29th September 2005 Incident Reference: 349879 Water Impact: Category 4 - No Impact Air Impact: Category 4 - No Impact Land Impact: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Asbestos Waste	A8NW (S)	523	2	321284 175806
35	Substantiated Pollution Incident Register Authority: Natural Resources Wales Incident Date: 13th April 2003 Incident Reference: 150733 Water Impact: Category 3 - Minor Incident Air Impact: Category 2 - Significant Incident Land Impact: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Atmospheric Pollutants and Effects: Smoke	A19SW (NE)	535	2	321825 176689
36	Substantiated Pollution Incident Register Authority: Natural Resources Wales Incident Date: 18th July 2001 Incident Reference: 17309 Water Impact: Category 3 - Minor Incident Air Impact: Category 2 - Significant Incident Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Atmospheric Pollutants And Effects: Other Atmospheric Pollutant Or Effect	A7SE (SW)	820	2	321089 175568

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
37	Water Abstractions Operator: Celsa Manufacturing (Uk) Ltd Licence Number: 21/57/25/0078 Permit Version: 2 Location: Underground Strata At Mineral Site Rover Way Authority: Natural Resources Wales Abstraction: Mineral Products: Dust Suppression Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 04 January Authorised End: 03 July Permit Start Date: 3rd October 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	209	2	321323 176141
37	Water Abstractions Operator: Celsa Manufacturing (Uk) Ltd Licence Number: 21/57/25/0078 Permit Version: 2 Location: Underground Strata At Mineral Site Rover Way Authority: Natural Resources Wales Abstraction: Mineral Products: Dust Suppression Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 3rd October 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	209	2	321323 176141
37	Water Abstractions Operator: Celsa Manufacturing (Uk) Ltd Licence Number: 21/57/25/0078 Permit Version: 2 Location: Underground Strata At Mineral Site Rover Way Authority: Natural Resources Wales Abstraction: Mineral Products: Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 3rd October 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	209	2	321323 176141
38	Water Abstractions Operator: Celsa Manufacturing (Uk) Ltd Licence Number: 21/57/25/0078 Permit Version: 1 Location: Underground Strata, Marine Alluvium And E A F Slag Authority: Natural Resources Wales Abstraction: Mineral Products: Dust Suppression Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 2nd March 2006 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A12SE (SW)	505	2	321040 176020

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
38	Water Abstractions Operator: Celsa Manufacturing (Uk) Ltd Licence Number: 21/57/25/0078 Permit Version: 1 Location: Underground Strata, Marine Alluvium And E A F Slag Authority: Natural Resources Wales Abstraction: Mineral Products: Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 2nd March 2006 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A12SE (SW)	505	2	321040 176020
	Water Abstractions Operator: Cardiff City Council Licence Number: 21/57/12/0039 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, Welsh Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: Well And Borehole Daily Rate (m3): 0 Yearly Rate (m3): 35 Details: Not Supplied Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A16NW (NW)	1702	3	319920 177020
	Water Abstractions Operator: Freeline Electro Plating Ltd Licence Number: 21/57/12/0074 Permit Version: 100 Location: Borehole At Freeline Electro Plating Ltd. Authority: Environment Agency, Welsh Region Abstraction: Other Industrial/Commercial/Public Services: General Washing/Process Washing Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th July 1981 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(N)	1826	3	320800 178000
39	Water Industry Act Referrals Name: Dwr Cymru Cyfyngedig Location: Cardiff Wwtw, Tide Field Road, TREMORFA, Cardiff, CF24 5SD Authority: Natural Resources Wales Permit Reference: AN0303701 Dated: 26th June 2009 Process Type: Permissions or amendments to discharge under the Water Industry Act 1991 Description: Processes which result in the discharge of Special Category effluents under The Trade Effluents (Prescribed Processes and Substances) Regulations Status: Application has been authorised and any conditions apply to the operator Positional Accuracy: Manually positioned within the geographical locality	A8NW (S)	390	2	321422 175910
	Groundwater Vulnerability Soil Classification: Not classified Map Sheet: Sheet 36 Mid Glamorgan Scale: 1:100,000	A13NE (NE)	0	3	321461 176298
	Drift Deposits None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - B	A13NE (NE)	0	2	321461 176298
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	A13NE (NE)	0	2	321461 176298

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied	A13NE (NE)	114	2	321544 176375
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied	A13NE (NE)	192	2	321595 176435
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
40	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 82.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rhymney Primacy: 2	A13NE (NE)	425	5	321763 176597
41	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 79.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rhymney Primacy: 2	A18SE (NE)	442	5	321699 176670
42	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 31.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rhymney Primacy: 2	A18SE (NE)	523	5	321758 176728
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 160.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rhymney Primacy: 2	A18SE (NE)	576	5	321793 176768
44	OS Water Network Lines Watercourse Form: Tidal river Watercourse Length: 2550.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Afon Rhymni Catchment Name: Rhymney Primacy: 1	A14NW (E)	616	5	322063 176422
45	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 372.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Rhymney Primacy: 2	A19SW (NE)	734	5	321904 176883

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
46	BGS Recorded Landfill Sites Site Name: British Steel Corp Location: Rover Way, Cardiff East Moors, CARDIFF, South Glamorgan Authority: British Geological Survey, National Geoscience Information Service Ground Water: Information not available Surface Water: Information not available Geology: N/A Positional Accuracy: Positioned by the supplier Boundary Accuracy: Moderate	A13NE (NE)	0	-	321461 176298
47	Historical Landfill Sites Licence Holder: Not Supplied Location: Rover Way, Cardiff East Moors, Cardiff, South Glamorgan Name: British Steel Corporation Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD31199 First Input Date: 31st December 1940 Last Input Date: Not Supplied Specified Waste Type: Deposited Waste included Inert and Industrial Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: 2044 Other Ref: Not Supplied	A13NE (NE)	0	2	321461 176298
48	Historical Landfill Sites Licence Holder: Slag Reduction Cardiff Location: Cardiff Name: Slag Reduction Limited Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15269 First Input Date: 31st December 1977 Last Input Date: 31st December 1990 Specified Waste Type: Deposited Waste included Inert and Industrial Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 6815/0095 BGS Ref: Not Supplied Other Ref: 4/77	A13SW (SW)	84	2	321419 176226
49	Historical Landfill Sites Licence Holder: Birds Shredded Produce Location: Rover Way, Cardiff, South Glamorganshire Name: Birds Fragmentiser Waste Tip Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15267 First Input Date: 31st December 1981 Last Input Date: 31st December 1991 Specified Waste Type: Deposited Waste included Industrial, Household and Special Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 6815/0007 BGS Ref: Not Supplied Other Ref: 4/81	A13SE (SE)	124	2	321556 176219
50	Historical Landfill Sites Licence Holder: GKN South Wales Limited Location: Cardiff, South Glamorganshire Name: GKN Fragmentiser Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15211 First Input Date: 31st December 1977 Last Input Date: 31st December 1981 Specified Waste Type: Deposited Waste included Industrial and Household Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 6815/0037 BGS Ref: Not Supplied Other Ref: 3/77	A13NE (E)	167	2	321624 176331

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
51	Historical Landfill Sites Licence Holder: Allied Steel and Wire Location: Flue Dust Pit, Cardiff Name: ASW North Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15241 First Input Date: 31st December 1991 Last Input Date: 31st December 1994 Specified Waste: Deposited Waste included Industrial Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 6815/0002 BGS Ref: Not Supplied Other Ref: Not Supplied	A13SW (S)	207	2	321455 176091
52	Historical Landfill Sites Licence Holder: Allied Steel and Wire Location: Flue Dust Pit, Rover Way, Cardiff Name: ASW South Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15270 First Input Date: 31st December 1988 Last Input Date: 31st December 1991 Specified Waste: Deposited Waste included Industrial and Special Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 6815/0003 BGS Ref: Not Supplied Other Ref: 88/09	A13SE (S)	287	2	321464 176011
53	Historical Landfill Sites Licence Holder: Crunchgrip Limited Location: Cardiff Name: Dragon Coal and Ovoids Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15172 First Input Date: 31st December 1986 Last Input Date: 31st December 1990 Specified Waste: Deposited Waste included Inert and Industrial Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 6815/0024 BGS Ref: Not Supplied Other Ref: 3/86	A8NW (SW)	485	2	321171 175909
54	Historical Landfill Sites Licence Holder: Cardiff Bay Development Corporation Location: Cardiff Name: Flue Dust Enclosure Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15263 First Input Date: 31st December 1989 Last Input Date: 31st December 1991 Specified Waste: Deposited Waste included Industrial Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 6815/0031 BGS Ref: Not Supplied Other Ref: Not Supplied	A8NW (SW)	498	2	321216 175864
55	Historical Landfill Sites Licence Holder: Allied Steel and Wire Location: Foreshore, Rovers Way, Cardiff Name: Flue and Dust Disposal Site Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15173 First Input Date: 31st December 1981 Last Input Date: 31st December 1988 Specified Waste: Deposited Waste included Inert and Industrial Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 6815/0030 BGS Ref: Not Supplied Other Ref: 1/80, 3/81	A8NW (S)	552	2	321351 175757

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
56	Historical Landfill Sites Licence Holder: Not Supplied Location: Cardiff, South Glamorganshire Name: Pengram Moors Landfill Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15217 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste: Deposited Waste included Inert, Industrial, Commercial and Household Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 6815/0079 BGS Ref: Not Supplied Other Ref: Not Supplied	A19SW (NE)	594	2	321878 176721
57	Historical Landfill Sites Licence Holder: British Steel Corporation Location: Cardiff Name: BSC Flue Dust Pit Extension Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15271 First Input Date: 31st December 1961 Last Input Date: 31st December 1981 Specified Waste: Deposited Waste included Industrial Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 6815/0013 BGS Ref: Not Supplied Other Ref: 2/77	A8NW (S)	608	2	321310 175709
58	Historical Landfill Sites Licence Holder: British Steel Location: Cardiff Name: BCS-GKN Flue Dust Pit Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15216 First Input Date: 31st December 1974 Last Input Date: 31st December 1976 Specified Waste: Deposited Waste included Industrial and Special Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 6815/0014 BGS Ref: Not Supplied Other Ref: Not Supplied	A8NW (S)	620	2	321324 175694
59	Historical Landfill Sites Licence Holder: W T Davies Transport Limited Location: Cardiff, South Glamorganshire Name: Land rear of Tarmac Topmix Site Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD14135 First Input Date: 31st December 1984 Last Input Date: 31st December 1985 Specified Waste: Deposited Waste included Inert Waste Type: EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 6815/0057 BGS Ref: Not Supplied Other Ref: 1/84	A7SE (SW)	812	2	321013 175621
60	Licensed Waste Management Facilities (Locations) Licence Number: 30093 Location: Cardiff Millscale Services, Rover Way, Cardiff Foreshore, Cardiff, CF1 5UX Operator Name: Simsmetal U K Ltd Operator Location: Long Marston, Stratford Upon Avon, Warwickshire, CU37 8AQ Authority: Environment Agency Wales, South East Area Site Category: Metal Recycling Sites (Mixed) Licence Status: Modified Issued: 7th May 1993 Last Modified: 28th August 2002 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13NW (N)	95	3	321458 176392

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
61	Licensed Waste Management Facilities (Locations) Licence Number: DP3699FM Location: Celsa Manufacturing UK Ltd, Celsa Manufacturing UK Ltd, Rover Way, Cardiff, Glamorgan, Cardiff, CF24 2RX Operator Name: Celsa Manufacturing (UK) Ltd Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Not Supplied Licence Status: Effective Issued: 6th February 2018 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	183	2	321617 176392
62	Licensed Waste Management Facilities (Locations) Licence Number: 30093 Location: Tremorfa Melt Shop, Seawall Road, Cardiff, CF24 2TH Operator Name: Celsa Manufacturing U K Ltd Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Physical Treatment Facilities Licence Status: Modified Issued: 7th May 1993 Last Modified: 24th April 2012 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	365	2	321194 176050
63	Licensed Waste Management Facilities (Locations) Licence Number: XP3495FC Location: Bill Way & Co Ltd, Tremorfa Industrial Estate, Rover Way, Cardiff, Cardiff, CF24 5SD Operator Name: Bill Way & Co Ltd Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Not Supplied Licence Status: Effective Issued: 17th January 2001 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	495	2	321181 175890
64	Licensed Waste Management Facilities (Locations) Licence Number: XB3293HS Location: National Engine Centre, Martin Rd, Tremorfa Ind Est, Cardiff, Cardiff, CF24 5SD Operator Name: Robert Lory Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Not Supplied Licence Status: Effective Issued: 26th February 2018 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	525	2	321238 175823

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
64	Licensed Waste Management Facilities (Locations) Licence Number: 900084 Location: Unit 16a, Martin Rd, Tremorfa Ind Est, Cardiff, CF24 5SD Operator Name: Lory Robert Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Vehicle depollution facility Licence Status: Issued Issued: 18th June 2014 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	525	2	321238 175823
64	Licensed Waste Management Facilities (Locations) Licence Number: UP3295FU Location: Unit 17, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, Cardiff, CF24 5SD Operator Name: Project Black Recycling Ltd Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Not Supplied Licence Status: Effective Issued: 17th October 2016 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (S)	532	2	321266 175803
64	Licensed Waste Management Facilities (Locations) Licence Number: 30224 Location: Unit 17, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Operator Name: R G F Haulage Ltd Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Household, Commercial And Industrial Transfer Stations Licence Status: Modified Issued: 20th December 2000 Last Modified: 22nd December 2007 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (S)	557	2	321252 175782
65	Licensed Waste Management Facilities (Locations) Licence Number: ZP3295FH Location: Diggers Dismantlers, Tremorfa Ind Estate, Cardiff, Glamorgan, Cardiff, CF24 5SD Operator Name: William David Roberts Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Not Supplied Licence Status: Effective Issued: 20th May 2004 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	558	2	321190 175810

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
65	Licensed Waste Management Facilities (Locations) Licence Number: 30319 Location: E L V Facility, 15 Martin Road , Tremorfa Ind Estate, Cardiff, CF24 5SD Operator Name: Roberts William David Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: End of Life Vehicles Licence Status: Issued Issued: 20th May 2004 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	558	2	321190 175810
66	Licensed Waste Management Facilities (Locations) Licence Number: GP3095FF Location: 1st Choice Vehicle Dismantlers, Units 12/13, Tremorfa Ind Estate, Cardiff, Glamorgan, Cardiff, CF24 5SD Operator Name: Malcolm David Harrison Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Not Supplied Licence Status: Effective Issued: 28th September 2001 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	609	2	321127 175789
66	Licensed Waste Management Facilities (Locations) Licence Number: 30244 Location: Units 12/13, Martin Road, Tremorfa Ind Estate, Cardiff, CF24 5SD Operator Name: Harrison Malcolm David Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Metal Recycling Sites (Vehicle Dismantlers) Licence Status: Modified Issued: 28th September 2001 Last Modified: 14th May 2010 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	609	2	321127 175789
66	Licensed Waste Management Facilities (Locations) Licence Number: YP3399FR Location: City Special Waste Ltd, Tremorfa Ind Est, Cardiff, Glamorgan, Cardiff, CF24 5SD Operator Name: City Special Waste Ltd Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Not Supplied Licence Status: Expired Issued: 18th May 1994 Last Modified: Not Supplied Expires: 28th September 2006 Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	634	2	321115 175767

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
67	Licensed Waste Management Facilities (Locations) Licence Number: WB3893HZ Location: Bayliss Metals, Tremorfa, Cardiff, Cardiff, CF24 5SD Operator Name: Bayliss Recovery Limited Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Not Supplied Licence Status: Effective Issued: 11th May 2018 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	693	2	321044 175745
68	Licensed Waste Management Facilities (Locations) Licence Number: 30303 Location: Unit 6, Martin Road, Tremorfa, Cardiff Operator Name: Action Environmental Waste Management Ltd Operator Location: Unit 6, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Authority: Environment Agency Wales, South East Area Site Category: Household, Commercial And Industrial Transfer Stations Licence Status: Issued Issued: 24th February 2004 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m	A7NE (SW)	699	3	321100 175700
69	Licensed Waste Management Facilities (Locations) Licence Number: CP3095FG Location: Action Environmental Waste Management Ltd (administration), Tremorfa, Cardiff, Glamorgan, Cardiff, CF24 5SD Operator Name: Action Environmental Waste Management Ltd (administration) Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Not Supplied Licence Status: Expired Issued: 24th February 2004 Last Modified: Not Supplied Expires: 21st October 2007 Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	809	2	321025 175617
69	Licensed Waste Management Facilities (Locations) Licence Number: 30303 Location: Unit 6, Martin Road, Tremorfa, Cardiff, Glamorgan, CF24 5SD Operator Name: Action Environmental Waste Management Ltd (administration) Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Household, Commercial And Industrial Transfer Stations Licence Status: Expired Issued: 24th February 2004 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	809	2	321025 175617

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
70	Licensed Waste Management Facilities (Locations) Licence Number: AB3993ZF Location: Sims Tremorfa, Unit 6 Martin Rd, Tremorfa Ind Est, Cardiff, Cardiff, CF24 5SD Operator Name: Sims Group UK Limited Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Not Supplied Licence Status: Effective Issued: 28th August 2018 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7NE (SW)	853	2	320934 175628
70	Licensed Waste Management Facilities (Locations) Licence Number: 30115 Location: Unit 5, Rover Way, Tremorfa Ind Est, Cardiff, Glamorgan, CF2 2RX Operator Name: Lane H Operator Location: Not Supplied Authority: Natural Resources Wales Site Category: Metal Recycling Sites (Mixed) Licence Status: Surrendered Issued: 6th January 1994 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 1st August 2002 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	860	2	320930 175622
	Local Authority Landfill Coverage Name: Cardiff Council - Has no landfill data to supply		0	6	321461 176298
71	Potentially Infilled Land (Non-Water) Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A13SW (W)	306	-	321155 176279
72	Potentially Infilled Land (Non-Water) Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A19SW (NE)	571	-	321904 176656
73	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A13NE (NE)	0	-	321461 176298
74	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A13NE (NE)	143	-	321562 176399
75	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A13SW (W)	221	-	321243 176260
76	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A13NW (N)	226	-	321402 176516
77	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A13NW (NW)	275	-	321232 176450
78	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A13NW (NW)	359	-	321171 176510
79	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18SE (N)	371	-	321484 176668
80	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A18SE (N)	377	-	321520 176670
81	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A13NW (NW)	377	-	321155 176518

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
82	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A12NE (W)	422	-	321041 176340
83	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18SE (N)	436	-	321566 176721
84	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18SW (NW)	443	-	321178 176638
85	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A18SW (NW)	446	-	321178 176643
86	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18SW (NW)	471	-	321215 176699
87	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A12SE (W)	479	-	320982 176296
88	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A12NE (NW)	490	-	321043 176553
89	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A18SW (N)	495	-	321412 176790
90	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18SW (N)	503	-	321422 176799
91	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18SE (N)	506	-	321527 176799
92	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18SW (NW)	526	-	321207 176758
93	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A18SW (NW)	553	-	321222 176797
94	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A12NE (NW)	561	-	320990 176601
95	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18SW (N)	603	-	321230 176855
96	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18SW (N)	606	-	321368 176896
97	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A18SW (N)	628	-	321448 176925
98	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18SE (N)	629	-	321479 176926
99	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1901	A17SE (NW)	638	-	321064 176797
100	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A17SE (NW)	649	-	321047 176797
101	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18SW (NW)	661	-	321191 176901
102	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A12SE (W)	677	-	320796 176173

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
103	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A12NE (NW)	686	-	320841 176592
104	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18SW (N)	694	-	321256 176961
105	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A17SE (NW)	697	-	321105 176897
106	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A17SE (NW)	727	-	321052 176898
107	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1901	A12NW (W)	740	-	320776 176577
108	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1901	A12NW (W)	749	-	320765 176575
109	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A17SE (NW)	783	-	320863 176803
110	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A17NE (NW)	796	-	321081 176996
111	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18NW (N)	797	-	321361 177088
112	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A18NE (N)	803	-	321524 177098
113	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A17NE (NW)	806	-	321051 176991
114	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A17SE (NW)	815	-	320863 176852
115	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1901	A12NW (W)	828	-	320638 176395
116	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A7NW (SW)	836	-	320774 175821
117	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1901	A17SW (NW)	838	-	320750 176743
118	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A18NW (N)	845	-	321181 177095
119	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A17NE (NW)	856	-	321055 177051
120	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A19NW (NE)	862	-	321858 177062
121	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A12SW (W)	868	-	320628 176054
122	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A7NW (SW)	874	-	320738 175808
123	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A17SW (NW)	891	-	320728 176804

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
124	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A12SW (W)	901	-	320593 176058
125	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A18NW (N)	912	-	321412 177209
126	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A12SW (W)	918	-	320577 176052
127	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A12NW (W)	929	-	320552 176491
128	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1951	A19NW (NE)	939	-	322007 177061
129	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A7NW (SW)	946	-	320711 175723
130	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A12SW (W)	948	-	320562 175997
131	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A18NE (N)	951	-	321610 177236
132	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A12NW (W)	954	-	320545 176563
133	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1886	A12NW (W)	972	-	320499 176437
134	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1922	A19NW (NE)	983	-	322049 177085
135	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1965	A19NW (NE)	995	-	322001 177133
136	Registered Landfill Sites Licence Holder: Birds Shredded Products Licence Reference: 4/81 Site Location: East Foreshore, Rover Way, Cardiff, South Glamorgan Licence Easting: 321560 Licence Northing: 176300 Operator Location: Rover Way, Tremorfa, CARDIFF, South Glamorgan, CF1 5UX Authority: Environment Agency Wales, South East Area Site Category: Landfill Max Input Rate: Undefined Waste Source: Waste produced/controlled by licence holder Restrictions: Status: Record supersededSuperseded Dated: Not Supplied Preceded By: Not Given Licence: Superseded By: P 3 (94/04) Licence: Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Iron/Steel Manufacturing Wastes Slag, Boiler/Flue Cleanings	A13NE (E)	100	3	321560 176300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
136	Registered Landfill Sites Licence Holder: G.J.N. S Wales Ltd Licence Reference: 3/77 Site Location: Cardiff Foreshore Adj.Rover Way, Cardiff, South Glamorgan Licence Easting: 321600 Licence Northing: 176300 Operator Location: Castle Works, Cardiff, South Glamorgan Authority: Environment Agency Wales, South East Area Site Category: Landfill Max Input Rate: Undefined Waste Source: No known restriction on source of waste Restrictions: Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st August 1977 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the road within the address or location Boundary Accuracy: Not Applicable Authorised Waste: Iron/Steel Manufacturing Wastes Slag, Boiler/Flue Cleanings	A13NE (E)	140	3	321600 176300
137	Registered Landfill Sites Licence Holder: Slag Reduction Company (Cardiff) Ltd Licence Reference: 4/77 Site Location: Cardiff Foreshore., Rover Way, Cardiff, South Glamorgan Licence Easting: 321300 Licence Northing: 176100 Operator Location: As Site Address Authority: Environment Agency Wales, South East Area Site Category: Landfill Max Input Rate: Undefined Waste Source: No known restriction on source of waste Restrictions: Status: Record supersededSuperseded Dated: 1st August 1977 Preceded By: Not Given Licence: Superseded By: 93/2 Licence: Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Iron/Steel Manufacturing Wastes Slag, Boiler/Flue Cleanings	A13SW (SW)	255	3	321300 176100
138	Registered Landfill Sites Licence Holder: Allied Steel & Wire Ltd Licence Reference: 88/09 Site Location: Behind Slag Reduction, Rover Way, Cardiff, South Glamorgan Licence Easting: 321470 Licence Northing: 175950 Operator Location: Po Box 83, Castle Works, Cardiff, South Glamorgan Authority: Environment Agency Wales, South East Area Site Category: Landfill Max Input Rate: Undefined Waste Source: Waste produced/controlled by licence holder Restrictions: Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st June 1988 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Flue Dust From Arrestment Apparatus Non-Tox.Inert Solids From Demolition Residue Ex Recov'Y Of Steel From Slag Slag & Scale Ex Iron/Steel Manuf. Prohibited Waste: Waste N.O.S.	A8NE (S)	349	3	321470 175950

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
139	Registered Landfill Sites Licence Holder: Crunchgrip Ltd T/A Roadstone Prod'S Licence Reference: 3/86 Site Location: Adj.Rover Way, Rear Of (Tarmac Topmix), Cardiff, South Glamorgan Licence Easting: 321900 Licence Northing: 176700 Operator Location: As Site Address Authority: Environment Agency Wales, South East Area Site Category: Landfill Max Input Rate: Undefined Waste Source: No known restriction on source of waste Restrictions: Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st September 1986 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the road within the address or location Boundary Accuracy: Not Applicable Authorised Waste: Hardcore Inert Demol. & Building Waste Soil,Subsoil Prohibited Waste: Liquid Wastes Special Wastes	A14NW (NE)	496	3	321826 176633
140	Registered Landfill Sites Licence Holder: B.S.C. Welsh Div. Licence Reference: 2/77 Site Location: Cardiff Foreshore At.Rover Way, Cardiff, South Glamorgan Licence Easting: 321200 Licence Northing: 175600 Operator Location: As Site Address Authority: Environment Agency Wales, South East Area Site Category: Landfill Max Input Rate: Undefined Waste Source: No known restriction on source of waste Restrictions: Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st August 1977 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the road within the address or location Boundary Accuracy: Not Applicable Authorised Waste: Iron/Steel Manufacturing Wastes Slag, Boiler/Flue Cleanings	A8NW (S)	646	3	321234 175694
141	Registered Landfill Sites Licence Holder: R Bailey Plant (Bedwas) Ltd Licence Reference: 89/01 Site Location: Rear Of Tarmac Topmix Site, Rover Way, Cardiff, South Glamorgan Licence Easting: 321000 Licence Northing: 175600 Operator Location: Bedwas House, Newport, Gwent Authority: Environment Agency Wales, South East Area Site Category: Landfill Max Input Rate: Undefined Waste Source: No known restriction on source of waste Restrictions: Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: Not Supplied Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the road within the address or location Boundary Accuracy: Not Applicable Authorised Waste: Brok.Concrete/Bricks/Hardcore/Rubble Nat.Occ. Soils/Clays/Gravels/Rocks Prohibited Waste: Liquid Wastes Special Wastes	A7NE (SW)	737	3	321056 175683

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
142	Registered Landfill Sites Licence Holder: Allied Steel And Wire Licence Reference: 3/81 Site Location: Cardiff Foreshore, Rover Way, Cardiff, South Glamorgan Licence Easting: 321100 Licence Northing: 175600 Operator Location: Po Box 83, Castle Works, Cardiff, South Glamorgan Authority: Environment Agency Wales, South East Area Site Category: Landfill Max Input Rate: Undefined Waste Source: Waste produced/controlled by licence holder Restrictions: Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st October 1981 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Constr'N/Demol. Inert/Non-Haz/Non-Tox Iron/Steel Manufacturing Wastes Slag, Boiler/Flue Cleanings	A7SE (SW)	786	3	321100 175600
143	Registered Landfill Sites Licence Holder: W T Davies (Transport) Ltd Licence Reference: 1/84 Site Location: Rover Way, (Adj. Tarmac Topmix), Tremorfa, Cardiff, South Glamorgan Licence Easting: 321000 Licence Northing: 175600 Operator Location: As Site Address Authority: Environment Agency Wales, South East Area Site Category: Landfill Max Input Rate: Undefined Waste Source: No known restriction on source of waste Restrictions: Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: Not Supplied Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Constr'N/Demol. Inert/Non-Haz/Non-Tox	A7SE (SW)	837	3	321000 175600
144	Registered Waste Transfer Sites Licence Holder: Slag Reduction Company (Cardiff) Ltd Licence Reference: T 9 (93/2) Site Location: Foreshore Site Rover Way, Tremorfa, Cardiff, South Glamorgan Operator Location: As Site Address Authority: Environment Agency Wales, South East Area Site Category: Transfer Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Record supersededSuperseded Dated: 7th May 1993 Preceded By: 93/2 Licence: Superseded By: T 9 (93/2) Licence: Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Cardboard Construction And Demolition Wastes Ferrous Swarf (Millscale) Foundry Sand Furnace Bricks Oil Other Ferrous Metal Other Non-Ferrous Metal Paper Plastic Slags Tyres Wood Prohibited Waste: Any Substances In Eec Dir. 80/68 Pumpable Sludges (< 20% Dry Solids) Special Wastes Waste In Sealed Drums Waste N.O.S.	A13NW (N)	54	3	321450 176350

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
144	Registered Waste Transfer Sites Licence Holder: Slag Reduction Company (Cardiff) Ltd Licence Reference: 93/2 Site Location: Foreshore Site Rover Way, Tremorfa, Cardiff, South Glamorgan Operator Location: As Site Address Authority: Environment Agency Wales, South East Area Site Category: Transfer Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Record supersededSuperseded Dated: 1st May 1993 Preceded By: 4/77 Licence: Superseded By: T 9 (93/2) Licence: Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Brick Demolition Wastes Ferrous Metal Scrap Max.Storage In Licence Non-Ferrous Metal Scrap Plastic, Wood Slag Swarf Prohibited Waste: Pumpable Sludge Wastes Sealed Drums Special Wastes	A13NW (N)	54	3	321450 176350
145	Registered Waste Transfer Sites Licence Holder: Marlee Metals & Skip Hire Ltd Licence Reference: EAWML30224 Site Location: Unit 17 Tremorfa Industrial Estate, off Martin Road, CARDIFF, South Glamorgan, CF2 2SD Operator Location: 8 Gilbert Place, Mynachdy, CARDIFF, South Glamorgan, CF4 3HF Authority: Environment Agency Wales, South East Area Site Category: Transfer Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational Dated: 19th December 2000 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Positioned by the supplier Boundary Quality: Good Authorised Waste: Degradable Household/Commercial/Industrial Waste (As In Post'98 E.A.Lics And Equivalent To 22.09.00) Maximum Waste Permitted By Licence Ukw 21.00.00 Inert Materials Ukw 22.00.00 General & Biodegradable Waste - Including Ukw 23.00.00 Metals & Discarded/Scrap Composite Equipment Ukw 24.00.00 Contaminated General Waste Prohibited Waste: Other Waste / Waste Not Otherwise Specified Special Waste (As In Epa 1990:S62 Of 1996 Regs) Ukw 25.00.00 Healthcare Risk Waste Ukw 26.00.00 Asbestos Waste Ukw 27.00.00 Mineral Wastes/Residues From Thermal Processes Not Listed Elsewhere Ukw 28.00.00 Inorganic Chemical Wastes Ukw 29.00.00 Organic Chemical Wastes Ukw 30.00.00 Mixed Chemical Smalls Ukw 31.00.00 Radioactive Waste Ukw 32.00.00 Explosive Waste Waste Solely/Mainly Finely Divided Metals Or Dusts/Powders/Loose Fibres	A8NW (S)	509	3	321274 175826

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
146	Registered Waste Transfer Sites Licence Holder: City Special Waste Ltd Licence Reference: 94/07 Site Location: 11 Martin Road, Tremorfa Industrial Estate, Rover Way, CARDIFF, South Glamorgan, CF2 Operator Location: 11 Martin Road, Tremorfa Industrial Estate, Rover Way, CARDIFF, South Glamorgan, CF2 Authority: Environment Agency Wales, South East Area Site Category: Transfer Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational Dated: 21st June 2000 Preceded By: 94/06 Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Animal Carcasses Asbestos (Bonded & Fibrous) Building & Demolition Wastes Car & Commercial Tyres Clinical Waste Grps B, D Domestic & Commercial Waste Drummed Special Waste (As In Epa 1990:S62 Of 1996 Regs) Fluorescent Tubes Gas Cylinders Industrial Waste Laboratory Smalls Lead/Acid Batteries Maximum Storage In Licence Maximum Waste Permitted By Licence Soil Contam. With Oil(Max 10%)/Asbestos/Heavy Metals/Chemicals - Incl> Special Waste Special Waste (As In Epa 1990:S62 Of 1996 Regs) - Comprising Prohibited Waste: Material With Haz.Code H 1 - Explosive Material With Haz.Code H 3a - Highly Flammable Material With Haz.Code H 3b - Flammable Material With Haz.Code H 7 - Carcinogenic Material With Haz.Code H10 - Teratogenic Material With Haz.Code H11 - Mutagenic Material With Haz.Code H12 - Can Release Toxic Gases Odorous Wastes (Unless In Sealed Containers) Other Waste/Waste Not Otherwise Specified Waste Liable To Attract Scavengers Wastes Likely To Create Litter (Unless In Sealed Containers)	A7NE (SW)	646	3	321120 175750
146	Registered Waste Transfer Sites Licence Holder: N Young t/a City Special Waste Licence Reference: T18 (94/07) Site Location: 11 Martin Road, Tremorfa Industrial Estate, Tremofa, CARDIFF, South Glamorgan, CF2 2SD Operator Location: As Site Address Authority: Environment Agency Wales, South East Area Site Category: Transfer Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Record supersededSuperseded Dated: 18th May 1994 Preceded By: Not Given Licence: Superseded By: 94/07 Licence: Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Asbestos Asbestos Cement Products Max.Storage Capacity In Licence Prohibited Waste: Any Waste Other Than Above	A7NE (SW)	646	3	321120 175750

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
146	Registered Waste Transfer Sites Licence Holder: N Young t/a City Salvage Ltd Licence Reference: 94/06 Site Location: 11 Martin Road, Tremorfa Industrial Estate, Rover Way, CARDIFF, South Glamorgan, CF2 Operator Location: As Site Address Authority: Environment Agency Wales, South East Area Site Category: Transfer Max Input Rate: Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Record supersededSuperseded Dated: 1st May 1994 Preceded By: Not Given Licence: Superseded By: 94/07 Licence: Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Building And Demolition Wastes Electrical Waste Machinery Max.Storage Capacity In Licence Plastics Scrap Metals Prohibited Waste: Batteries Free Flammable Solvents Liquid Wastes Pcb'S Special Wastes Tyres	A7NE (SW)	646	3	321120 175750
147	Registered Waste Treatment or Disposal Sites Licence Holder: Allied Metals Ltd Licence Reference: P 3 (94/04) Site Location: Rover Way, Tremorfa, CARDIFF, South Glamorgan, CF1 5UX Operator Location: Atlantech House, Beaufort Square, CHEPSTOW, Gwent, NP6 5EP Authority: Environment Agency Wales, South East Area Site Category: Scrapyard Max Input Rate: Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational Dated: 12th April 1994 Preceded By: 4/81 Licence: Superseded By: Not Given Licence: Positional Accuracy: Positioned by the supplier Boundary Quality: Good Authorised Waste: Max.Storage In Licence Max.Waste Permitted By Licence Other Scrap Products Scrap Railway Wagons Scrap Vehicle Shells Trans/Capac (<0.5kg) Attached To Equip Prohibited Waste: Any Metal In Fine Powder Form Elemental Mercury Elemental Sodium/Potassium Liquid Wastes Percussive/Explosive/Similar Waste Sludge Wastes Special Wastes Sub'S Control. Radioactive Subs Act'60 Trans/Cpac'S(>0.5kg) Likely Cont.Pcbs Undrained Vehicles Waste N.O.S.	A13SE (SE)	45	3	321497 176272

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
148	Registered Waste Treatment or Disposal Sites Licence Holder: Phillip Metals (Europe) Ltd Licence Reference: T 9 (93/2) Site Location: Cardiff Foreshore, Rover Way, Tremorfa, CARDIFF, South Glamorgan, CF1 5UX Operator Location: Allied House, Beaufort Square, CHEPSTOW, Gwent, NP6 5EP Authority: Environment Agency Wales, South East Area Site Category: Transfer - with treatment Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational Dated: 13th March 1998 Preceded By: T 9 (93/2) Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Com. & Ind. Waste Max.Stor Com/Ind.Waste For Auth.Proc. Max.Stor Ferrous Metals Max.Stor Foundry Sand For Auth.Proc. Max.Stor Max.Waste Permitted By Licence Millscale Max.Stor Non-Ferrous Metals Max.Stor Refractory Brick For Auth.Pr' Max.Stor Unprocessed Slags Max.Stor Prohibited Waste: Healthcare/Clinical Wastes Liquid/Sludge Wastes Lpg Cylinders Putrescible Waste Other Than Wood/Paper/Cardboard Spec.Waste (Epa'90:S62/1996 Regs) Spec.Waste (Epa'90:S62/1996 Regs)N.O.S Waste N.O.S.	A13NW (N)	54	3	321450 176350
149	Registered Waste Treatment or Disposal Sites Licence Holder: Bill Way % Co Ltd Licence Reference: EAWML30238 Site Location: Unit 16 Tremorfa Industrial Estate, Rover Way, CARDIFF, South Glamorgan, CF2 2SD Operator Location: Unit 16 Tremorfa Industrial Estate, Rover Way, CARDIFF, South Glamorgan, CF2 2SD Authority: Environment Agency Wales, South East Area Site Category: Scrapyard Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational Dated: 17th January 2001 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Positioned by the supplier Boundary Quality: Good Authorised Waste: Maximum Waste Permitted By Licence Vehicles (Incl. Special Waste Which Is Normal / Necessary Part Of Vehicle) Degradable Household/Commercial/Industrial Waste (As In Post'98 E.A.Lics And Equivalent To 22.09.00) Inert Materials (As In Post'98 E.A.Lics And Equivalent To 21.00.00) Other Waste / Waste Not Otherwise Specified Special Waste (As In Epa 1990:S62 Of 1996 Regs) Not Otherwise Specified	A8NW (SW)	474	3	321249 175875

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
150	Registered Waste Treatment or Disposal Sites Licence Holder: M Harrison T/A 1st Choice Vehicle Dismant Licence Reference: Eawml30244 Site Location: 1st Choice Vehicle Dismantlers, Units 12/13 Martins Road, Rover Way, Cardiff, South Glamorgan, Cf2 2sd Operator Location: 1st Choice Vehicle Dismantlers, Units 12/13 Martins Road, Rover Way, Cardiff, South Glamorgan, Cf2 2sd Authority: Environment Agency Wales, South East Area Site Category: Scrapyard Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational Dated: 28th September 2001 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Approximate location provided by supplier Boundary Quality: Not Supplied Authorised Waste: Metal Waste/Scrap Metal (Inferred From Regis Listing) New Licence, Wastes Not To Hand	A8NW (SW)	563	3	321200 175800
151	Registered Waste Treatment or Disposal Sites Licence Holder: H J Lane t/a Tremorfa Autosalvage Licence Reference: S12 (94/02) Site Location: Unit 5 Martin Road, Tremorfa Industrial Estate, CARDIFF, South Glamorgan, CF2 2RX Operator Location: As Site Address Authority: Environment Agency Wales, South East Area Site Category: Scrapyard Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Operational as far as is knownOperational Dated: 6th January 1994 Preceded By: Not Given Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Max.Waste Permitted By Licence Oil/Water Mixtures Scrap Engines Scrap Tyres Scrap Vehicles Incl. Undrained Car Batteries Any Metal In Fine Powder Form Asbestos Epoxy Resins (Not Finished Prod'S) Insulated Cable Liquid Waste N.O.S. Sodium/Potassium Special Wastes Trans/Capc(>0.5kg) Cont.Pcbs/Analoges Waste N.O.S. Waste With Free Flam.Solvents Prohibited Waste	A7NE (SW)	797	3	320970 175670

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
152	Control of Major Accident Hazards Sites (COMAH) Name: Allied Steel and Wire Ltd Location: Tremorfa Steel Works, PO Box 37, Seawall Road, CARDIFF, South Glamorgan, CF24 5TH Reference: Not Supplied Type: Lower Tier Status: Record Ceased To Be Supplied Under COMAH Regulations Positional Accuracy: Automatically positioned to the address	A12SW (W)	766	7	320695 176297
153	Notification of Installations Handling Hazardous Substances (NIHHS) Name: Tremorfa Steelworks (Asw Plc) Location: P O Box 37, Tremorfa Works, CARDIFF, South Glamorgan, CF24 5YX Status: Not Active Positional Accuracy: Manually positioned within the geographical locality	A13NW (NW)	297	7	321236 176492
154	Planning Hazardous Substance Consents Name: Allied Steel & Wire Ltd Location: Tremorfa Steelworks, Rover Way, Cardiff, South Glamorgan, Cf1 5ux Authority: Cardiff Council, Regulatory Services Application Ref: H/92/00001/R Hazardous Substance: Unknown at time of report Maximum Quantity: 30 Application date: 19th October 1992 Decision: Deemed Consent Granted Positional Accuracy: Manually positioned to the road within the address or location	A7NE (SW)	564	8	321030 175934
155	Planning Hazardous Substance Consents Name: Total Butler Location: Seawall Road, Tremorfa, Cardiff, CF24 5TH Authority: Cardiff Council, Regulatory Services Application Ref: 08/00534/E Hazardous Substance: Part C, Flammable Substance (Not in Parts A&B), Liquefied gas or gases, flammable in air with a boiling point of <0C, where amount held >= 50tonnes Maximum Quantity: 0 Application date: 29th February 2008 Decision: Deemed Consent Granted Positional Accuracy: Manually positioned to the road within the address or location	A12NE (W)	639	8	320824 176353

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Triassic Rocks (Undifferentiated)	A13NE (NE)	0	1	321461 176298
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NE (NE)	0	1	321461 176298
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: no data Chromium Concentration: 60 - 90 mg/kg Lead Concentration: no data Nickel Concentration: 15 - 30 mg/kg	A14SW (SE)	617	1	322000 176000
156	BGS Recorded Mineral Sites Site Name: Rover Way Location: Cardiff, Glamorgan Source: British Geological Survey, National Geoscience Information Service Reference: 505 Type: Tip Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Not Available Geology: Blast Furnace Slag Commodity: Slag (Including Basic Oxygen Slag and Electric Arc Furnace Slags) Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	666	1	321138 175716
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 321220, 176210 Soil Sample Type: Topsoil Sample Area: Cardiff Arsenic Measured Concentration: 11.60 mg/kg Cadmium Measured Concentration: 1.70 mg/kg Chromium Measured Concentration: 157.90 mg/kg Lead Measured Concentration: 89.70 mg/kg Nickel Measured Concentration: 29.30 mg/kg	A13SW (W)	257	1	321220 176210
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 321750, 176250 Soil Sample Type: Topsoil Sample Area: Cardiff Arsenic Measured Concentration: 70.70 mg/kg Cadmium Measured Concentration: 48.60 mg/kg Chromium Measured Concentration: 864.70 mg/kg Lead Measured Concentration: 4959.30 mg/kg Nickel Measured Concentration: 482.10 mg/kg	A13SE (E)	294	1	321750 176250

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 321220, 176720 Soil Sample Type: Topsoil Sample Area: Cardiff Arsenic Measured 30.10 mg/kg Concentration: Cadmium Measured 1.80 mg/kg Concentration: Chromium Measured 154.30 mg/kg Concentration: Lead Measured 665.00 mg/kg Concentration: Nickel Measured 50.20 mg/kg Concentration:	A18SW (NW)	486	1	321220 176720
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 321770, 176760 Soil Sample Type: Topsoil Sample Area: Cardiff Arsenic Measured 10.90 mg/kg Concentration: Cadmium Measured 2.50 mg/kg Concentration: Chromium Measured 544.30 mg/kg Concentration: Lead Measured 668.00 mg/kg Concentration: Nickel Measured 191.40 mg/kg Concentration:	A18SE (NE)	557	1	321770 176760
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 321220, 175770 Soil Sample Type: Topsoil Sample Area: Cardiff Arsenic Measured 149.00 mg/kg Concentration: Cadmium Measured 100.60 mg/kg Concentration: Chromium Measured 2932.80 mg/kg Concentration: Lead Measured 8158.30 mg/kg Concentration: Nickel Measured 384.10 mg/kg Concentration:	A8NW (SW)	581	1	321220 175770
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 320550, 176160 Soil Sample Type: Topsoil Sample Area: Cardiff Arsenic Measured 19.80 mg/kg Concentration: Cadmium Measured 0.60 mg/kg Concentration: Chromium Measured 75.80 mg/kg Concentration: Lead Measured 215.40 mg/kg Concentration: Nickel Measured 35.60 mg/kg Concentration:	A12SW (W)	921	1	320550 176160

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Urban Soil Chemistry Averages Source: British Geological Survey, National Geoscience Information Service Sample Area: Cardiff Count Id: 506 Arsenic Minimum Concentration: 6.00 mg/kg Arsenic Average Concentration: 18.00 mg/kg Arsenic Maximum Concentration: 149.00 mg/kg Cadmium Minimum Concentration: 0.10 mg/kg Cadmium Average Concentration: 0.90 mg/kg Cadmium Maximum Concentration: 100.60 mg/kg Chromium Minimum Concentration: 28.00 mg/kg Chromium Average Concentration: 86.00 mg/kg Chromium Maximum Concentration: 2933.00 mg/kg Lead Minimum Concentration: 20.00 mg/kg Lead Average Concentration: 190.00 mg/kg Lead Maximum Concentration: 8158.00 mg/kg Nickel Minimum Concentration: 8.00 mg/kg Nickel Average Concentration: 35.00 mg/kg Nickel Maximum Concentration: 482.00 mg/kg	A13NE (NE)	0	1	321461 176298
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	321461 176298
	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	321461 176298
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	202	1	321642 176210
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	321461 176298
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	321461 176298
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	225	1	321578 176106
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	321461 176298
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	202	1	321642 176210
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	321461 176298
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	321461 176298

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	321461 176298

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
157	Contemporary Trade Directory Entries Name: Sims Metal Management Location: Rover Way, Cardiff, CF24 2RX Classification: Scrap Metal Merchants Status: Active Positional Accuracy: Automatically positioned to the address	A13NE (E)	143	-	321601 176323
157	Contemporary Trade Directory Entries Name: Sims Metal Management Location: Rover Way, Cardiff, CF24 2RX Classification: Scrap Metal Merchants Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NE (E)	143	-	321601 176323
158	Contemporary Trade Directory Entries Name: Classic Restoration Location: 100, Willows Avenue, Cardiff, CF24 2SU Classification: Furniture - Repairing & Restoring Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (NW)	481	-	321059 176561
158	Contemporary Trade Directory Entries Name: 1st Choice Location: 100, Willows Avenue, Cardiff, CF24 2SU Classification: Door Manufacturers - Industrial Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (NW)	481	-	321059 176561
159	Contemporary Trade Directory Entries Name: A Plus L Location: Unit 5 Hunters Industrial Estate, Cardiff, South Glamorgan, CF24 5TH Classification: Precision Engineers Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (W)	482	-	321009 176464
159	Contemporary Trade Directory Entries Name: J J Motors Cardiff Location: Unit 3, Seawall Road, Cardiff, CF24 5TH Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (W)	495	-	321000 176477
159	Contemporary Trade Directory Entries Name: Sealmasters Location: Unit 2, Seawall Road, Cardiff, CF24 5TH Classification: Seal & Joint Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (W)	518	-	320966 176452
159	Contemporary Trade Directory Entries Name: B S P Pneumatic Centre Location: 5, Seawall Road, Cardiff, South Glamorgan, CF24 5TH Classification: Hydraulic Equipment & Accessories - Sales & Service Status: Inactive Positional Accuracy: Manually positioned to the address or location	A12NE (W)	518	-	320966 176452
159	Contemporary Trade Directory Entries Name: Parfitt Tyres Ltd Location: 5, Seawall Road, CARDIFF, CF24 5TH Classification: Tyre Dealers Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (W)	518	-	320966 176452
159	Contemporary Trade Directory Entries Name: Seawall M O T Ltd Location: Unit 2, Seawall Road, Cardiff, CF24 5TH Classification: Car Body Repairs Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (W)	518	-	320966 176452
159	Contemporary Trade Directory Entries Name: Garwill Engineering Ltd Location: Unit 5, Seawall Road, Cardiff, South Glamorgan, CF24 5TH Classification: Precision Engineers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (W)	518	-	320966 176452
160	Contemporary Trade Directory Entries Name: National Engine Centre Review Location: Unit 16, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Classification: Engine Rebuilding & Reconditioning Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (SW)	503	-	321209 175863

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
160	Contemporary Trade Directory Entries Name: Parts (Uk) Location: Unit 16, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Classification: Scrap Yards Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (SW)	503	-	321209 175863
160	Contemporary Trade Directory Entries Name: Diggers Location: Unit 15, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Classification: Car Breakers & Dismantlers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (SW)	537	-	321184 175839
160	Contemporary Trade Directory Entries Name: The Engine Shop Location: 16 Martin Rd, Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Engine Rebuilding & Reconditioning Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A8NW (SW)	550	-	321148 175846
161	Contemporary Trade Directory Entries Name: R H I Refractories Site Services Ltd Location: Cardiff, CF24 5TH Classification: Refractory Materials & Supplies Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (W)	509	-	320954 176343
161	Contemporary Trade Directory Entries Name: Cardiff Wire Erosion & Engineering Location: 94, Seawall Road, Cardiff, CF24 5XB Classification: Precision Engineers Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (W)	529	-	320933 176323
161	Contemporary Trade Directory Entries Name: Harsco Metals Location: Seawall Road, Cardiff, CF24 5TH Classification: Steel Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (W)	529	-	320933 176323
161	Contemporary Trade Directory Entries Name: Mepco Mouldings Ltd Location: Mepco House, 85, Seawall Road, Cardiff, CF24 5TH Classification: Plastic Products - Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (W)	529	-	320933 176323
161	Contemporary Trade Directory Entries Name: C & G Accident Repair Location: Mepco House, 85, Seawall Road, Cardiff, CF24 5TH Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (W)	529	-	320933 176323
162	Contemporary Trade Directory Entries Name: Generation Hire & Sale Location: Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Classification: Scaffolding & Work Platforms Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (SW)	515	-	321140 175895
163	Contemporary Trade Directory Entries Name: South Western Print Finishers Location: 16a, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Classification: Print Finishers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (SW)	531	-	321241 175815
163	Contemporary Trade Directory Entries Name: A A 1 Location: Unit 15, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Classification: Car Breakers & Dismantlers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (SW)	535	-	321205 175829

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
164	Contemporary Trade Directory Entries Name: J & H Supplies Location: unit 2b Seawall Rd, Cardiff, South Glamorgan, CF24 5TH Classification: Fireplaces & Mantelpieces Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A12NE (W)	554	-	320928 176448
164	Contemporary Trade Directory Entries Name: Knight Fire & Security Products Ltd Location: 84, Seawall Road, Cardiff, CF24 5TH Classification: Plastics - Injection Moulding Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (W)	556	-	320925 176444
164	Contemporary Trade Directory Entries Name: King David Tyres Ltd Location: Seawall Rd, Cardiff, South Glamorgan, CF24 5TH Classification: Tyre Dealers Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A12NE (W)	565	-	320914 176438
164	Contemporary Trade Directory Entries Name: Gremer Chemicals Uk Ltd Location: Seawall Road, Cardiff, CF24 5TH Classification: Cleaning Materials & Equipment Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (W)	571	-	320916 176469
165	Contemporary Trade Directory Entries Name: D M D Mechanical Engineering Ltd Location: Darby Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SB Classification: Mechanical Engineers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	590	-	321095 175835
166	Contemporary Trade Directory Entries Name: Cardiff Bay Auto Centre Ltd Location: Unit 5 Seawall Road, Cardiff, South Glamorgan, CF24 5TH Classification: Mot Testing Centres Status: Active Positional Accuracy: Manually positioned to the road within the address or location	A12NE (W)	592	-	320880 176410
166	Contemporary Trade Directory Entries Name: Total Butler Location: Seawall Road, Cardiff, CF24 5TH Classification: Oil Fuel Distributors Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (W)	593	-	320874 176380
166	Contemporary Trade Directory Entries Name: Certas Energy Location: Seawall Road, Cardiff, CF24 5TH Classification: Oil Fuel Distributors Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (W)	593	-	320874 176380
166	Contemporary Trade Directory Entries Name: Metalskills Location: 85, Seawall Road, Cardiff, CF24 5TH Classification: Gate Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (W)	599	-	320866 176368
166	Contemporary Trade Directory Entries Name: C J'S Accident Repair Location: 85, Seawall Road, Cardiff, CF24 5TH Classification: Car Body Repairs Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (W)	599	-	320866 176368
166	Contemporary Trade Directory Entries Name: Philip Huntley Location: Seawall Road, Cardiff, CF24 5TH Classification: Fire Escapes & Evacuation Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (W)	604	-	320859 176348
166	Contemporary Trade Directory Entries Name: Cardiff Engineering Location: 83, Seawall Road, Cardiff, CF24 5TH Classification: Engineers - General Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (W)	604	-	320857 176327

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
166	Contemporary Trade Directory Entries Name: Cardiff Engineering Co Ltd Location: 83, Seawall Road, Cardiff, CF24 5TH Classification: Engineering Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (W)	604	-	320857 176327
166	Contemporary Trade Directory Entries Name: Car Care Body Shop Location: 85A Seawall Rd, Cardiff, South Glamorgan, CF24 5TH Classification: Car Body Repairs Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A12NE (W)	620	-	320846 176374
166	Contemporary Trade Directory Entries Name: Miss Lulu Location: 82, Seawall Road, Cardiff, CF24 5TH Classification: Bags, Belts & Accessories - Manufacturers & Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NE (W)	633	-	320830 176351
166	Contemporary Trade Directory Entries Name: Z C C Garage Location: Mepco House, 85, Seawall Road, Cardiff, CF24 5TH Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A12NE (W)	641	-	320823 176368
167	Contemporary Trade Directory Entries Name: First Choice Vehicles Location: Unit 12-13 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Mot Testing Centres Status: Active Positional Accuracy: Manually positioned to the address or location	A8NW (SW)	599	-	321149 175787
167	Contemporary Trade Directory Entries Name: 1st Choice Vehicle Dismantlers Location: Unit 12-13, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Classification: Car Breakers & Dismantlers Status: Active Positional Accuracy: Automatically positioned to the address	A8NW (SW)	599	-	321149 175788
167	Contemporary Trade Directory Entries Name: It Works Location: Martin Rd, Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Computer Recycling & Disposal Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A7NE (SW)	628	-	321110 175777
168	Contemporary Trade Directory Entries Name: D D Windows Location: 24, Mercia Road, Cardiff, CF24 2TF Classification: PVC-U Products - Manufacturers & Suppliers Status: Inactive Positional Accuracy: Automatically positioned to the address	A17SE (NW)	601	-	320998 176681
169	Contemporary Trade Directory Entries Name: Baldwins Industrial Services Plc Location: Crane House, Rover Way, Cardiff, South Glamorgan, CF24 2RX Classification: Crane Hire, Sales & Service Status: Inactive Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	621	-	321859 176774
169	Contemporary Trade Directory Entries Name: Auto Salvage Location: Rover Way, Cardiff, South Glamorgan, CF24 2RX Classification: Salvage Dealers Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A19SW (NE)	628	-	321850 176790
170	Contemporary Trade Directory Entries Name: Body & Soul Autoworks Location: Unit 3, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Classification: Car Body Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	653	-	321101 175753

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
170	Contemporary Trade Directory Entries Name: 1st Choice Vehicles Location: Unit 12-13 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Mot Testing Centres Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A7NE (SW)	660	-	321118 175734
170	Contemporary Trade Directory Entries Name: C & B Car Repairs Location: Unit 1d, Martin Rd, Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Garage Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A7NE (SW)	685	-	321082 175728
170	Contemporary Trade Directory Entries Name: Bill Way & Co Ltd Location: 16 Martin Rd, Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Car Breakers & Dismantlers Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A7NE (SW)	691	-	321080 175722
170	Contemporary Trade Directory Entries Name: Marlee Metals & Skip Hire Ltd Location: Unit 17, Off Martin Road, Cardiff, South Glamorgan, CF24 2SD Classification: Scrap Metal Merchants Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A7NE (SW)	692	-	321080 175721
170	Contemporary Trade Directory Entries Name: The Panel Shop Location: Martin Road, Tremorfa Industrial Estate, Tremorfa, CARDIFF, CF24 5SD Classification: Car Breakers & Dismantlers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	699	-	321095 175703
170	Contemporary Trade Directory Entries Name: Commercial Motors Location: Martin Rd, Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Commercial Vehicle Dealers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A7NE (SW)	709	-	321034 175732
171	Contemporary Trade Directory Entries Name: Ace Tyre Services Location: Martin Road, Tremorfa Industrial Estate, Tremorfa, CARDIFF, CF24 5SD Classification: Tyre Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (SW)	667	-	321147 175710
171	Contemporary Trade Directory Entries Name: Ace Tyre Services Location: Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Tyre Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NW (SW)	667	-	321147 175710
172	Contemporary Trade Directory Entries Name: B S P Sales Centre Location: Unit 5, Seawall Court, Seawall Road, CARDIFF, CF24 5PQ Classification: Pneumatic Systems & Equipment Status: Active Positional Accuracy: Automatically positioned to the address	A12NW (W)	697	-	320779 176442
172	Contemporary Trade Directory Entries Name: Conway Tolhurst Ltd Location: Seawall Road, Cardiff, CF24 5XE Classification: Sheet Metal Work Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	699	-	320777 176441
172	Contemporary Trade Directory Entries Name: Torque Motors Ltd Location: Seawall Road, Cardiff, CF24 5TH Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A12NW (W)	703	-	320767 176412

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
172	Contemporary Trade Directory Entries Name: Carrington Wire Location: Seawall Road, Cardiff, CF24 5TH Classification: Wire Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	712	-	320759 176418
173	Contemporary Trade Directory Entries Name: Industrial Training Services Uk Ltd Location: Unit 7, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Classification: Fork Lift Trucks Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	698	-	320998 175776
173	Contemporary Trade Directory Entries Name: Cardiff Reclamation Ltd Location: Unit 7, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Classification: Reclamation Centres Status: Active Positional Accuracy: Automatically positioned to the address	A7NE (SW)	698	-	320998 175776
173	Contemporary Trade Directory Entries Name: Hayward James Motor Co Ltd Location: Unit 1c, Martin Rd, Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Car Dealers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A7NE (SW)	698	-	320998 175776
173	Contemporary Trade Directory Entries Name: Action Recycling Ltd Location: Unit 6, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Reclaiming - Waste Products Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	716	-	320989 175760
173	Contemporary Trade Directory Entries Name: Presco (Uk) Ltd Location: Unit 4, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Catering Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	740	-	320977 175738
174	Contemporary Trade Directory Entries Name: Glamorgan White Lining Location: Seawall Road, Cardiff, CF24 5TH Classification: Road Marking & Surfacing Equipment & Material Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A12NW (W)	705	-	320758 176356
175	Contemporary Trade Directory Entries Name: Mot'S 4 U Location: Unit 1c, Martin Rd, Tremorfa Ind Est, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Mot Testing Centres Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A7NE (SW)	760	-	320979 175710
175	Contemporary Trade Directory Entries Name: E-Pro Automotive Ltd Location: Unit 1, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Classification: Engine Rebuilding & Reconditioning Status: Active Positional Accuracy: Automatically positioned to the address	A7NE (SW)	771	-	320969 175704
175	Contemporary Trade Directory Entries Name: Celtic Chem-Dry Location: Unit 1, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Carpet, Curtain & Upholstery Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	775	-	320960 175707
175	Contemporary Trade Directory Entries Name: Cars Cardiff Location: Unit 1, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Car Dealers - Used Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	775	-	320960 175707

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
175	Contemporary Trade Directory Entries Name: Celtic Chem-Dry Location: Unit 1, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Classification: Carpet, Curtain & Upholstery Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	775	-	320960 175707
175	Contemporary Trade Directory Entries Name: Cardiff Van Centre Location: Unit 1, Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, South Glamorgan, CF24 5SD Classification: Commercial Vehicle Dealers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A7NE (SW)	775	-	320960 175707
176	Contemporary Trade Directory Entries Name: Crafted Coffins Location: Unit 1-2, Pacific Business Park, Pacific Road, Cardiff, CF24 5HJ Classification: Coffin Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NW (SW)	875	-	320709 175851
176	Contemporary Trade Directory Entries Name: D4 Print Location: Pacific Business Pk, Pacific Rd, Cardiff, South Glamorgan, CF24 5HJ Classification: Printers Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A7NW (SW)	878	-	320720 175828
177	Contemporary Trade Directory Entries Name: Tesco Filling Station Location: Eastern Bay Road, Cardiff, South Glamorgan, CF24 2HP Classification: Petrol Filling Stations Status: Active Positional Accuracy: Manually positioned within the geographical locality	A19NW (NE)	896	-	321845 177107
178	Contemporary Trade Directory Entries Name: Print Partnership Location: Unit 11, Pacific Business Park, Pacific Road, Cardiff, CF24 5HJ Classification: Printers Status: Active Positional Accuracy: Automatically positioned to the address	A7NW (SW)	924	-	320620 175915
178	Contemporary Trade Directory Entries Name: Print Partnership Location: Unit 11, Pacific Business Park, Pacific Road, Cardiff, CF24 5HJ Classification: Copying & Duplicating Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NW (SW)	947	-	320602 175899
179	Contemporary Trade Directory Entries Name: Cardiff Joinery Ltd Location: Unit 46, Portmanmoor Rd Ind Est, Cardiff, South Glamorgan, CF24 5HB Classification: Joinery Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A12SW (W)	980	-	320496 176130
180	Contemporary Trade Directory Entries Name: Bespoke Wheels Location: 24, Hinton Street, Cardiff, CF24 2EU Classification: Cycle Accessories, Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	981	-	320488 176422
181	Fuel Station Entries Name: Tesco Cardiff Pengam Extra Location: Eastern Bay Road, Ffurdd Pengam, Cardiff, Cardiff, CF24 2HP Brand: Tesco Extra Premises Type: Hypermarket Status: Open Positional Accuracy: Manually positioned to the address or location	A18NE (N)	956	-	321625 177239
182	Points of Interest - Commercial Services Name: Scrap Yard Location: CF24 Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A13SW (SW)	41	9	321438 176264

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
182	Points of Interest - Commercial Services Name: Scrap Yard Location: Not Supplied Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	52	9	321440 176345
182	Points of Interest - Commercial Services Name: Scrap Yard Location: CF24 Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A13NW (N)	53	9	321444 176348
183	Points of Interest - Commercial Services Name: Scrap Yard Location: CF24 Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A13NE (E)	118	9	321577 176317
183	Points of Interest - Commercial Services Name: Sims Metal Management Location: Rover Way, Cardiff, CF24 2RX Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A13NE (E)	142	9	321600 176322
183	Points of Interest - Commercial Services Name: Sims Metal UK Ltd Location: Rover Way, Cardiff, CF24 2RX Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A13NE (E)	143	9	321601 176323
183	Points of Interest - Commercial Services Name: Sims Metal Management Cardiff Location: Rover Way, Cardiff, CF24 2RX Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A13NE (E)	143	9	321601 176323
184	Points of Interest - Commercial Services Name: J J Motors Cardiff Location: Unit 3, Seawall Road, Cardiff, CF24 5TH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	501	9	320992 176475
184	Points of Interest - Commercial Services Name: Seawall M O T Ltd Location: Unit 2, Seawall Road, Cardiff, CF24 5TH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	518	9	320966 176452
184	Points of Interest - Commercial Services Name: Seawall MOT Location: Unit 5, Seawall Road, Cardiff, CF24 5TH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	518	9	320966 176452
184	Points of Interest - Commercial Services Name: Cardiff Bay Auto Centre Ltd Location: Unit 5 Seawall Road, Cardiff, CF24 5TH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	519	9	320965 176452
185	Points of Interest - Commercial Services Name: Bill Way & Co Location: Unit 16 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A8NW (SW)	503	9	321209 175863
185	Points of Interest - Commercial Services Name: Diggers Vehicle Dismantlers Location: Unit 15 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A8NW (SW)	538	9	321183 175838

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
185	Points of Interest - Commercial Services Name: E D S Location: Unit 11 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A8NW (SW)	542	9	321250 175799
185	Points of Interest - Commercial Services Name: Silverdell Ltd Location: Unit 11 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A8NW (SW)	542	9	321250 175799
185	Points of Interest - Commercial Services Name: Silverdell Asbestos Removal Plc Location: Unit 11 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A8NW (SW)	542	9	321250 175799
185	Points of Interest - Commercial Services Name: Silverdell Ltd Location: Unit 11 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A8NW (SW)	543	9	321249 175798
186	Points of Interest - Commercial Services Name: Z C C Garage Location: Mepco House 85, Seawall Road, Cardiff, CF24 5TH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	529	9	320933 176322
186	Points of Interest - Commercial Services Name: Metal Skills Location: 85 Seawall Road, Cardiff, CF24 5TH Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A12NE (W)	599	9	320866 176368
186	Points of Interest - Commercial Services Name: Metalskills Wrought Ironwork Location: 85 Seawall Road, Cardiff, CF24 5TH Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A12NE (W)	599	9	320866 176368
186	Points of Interest - Commercial Services Name: Car Care Body Shop Location: 85 Seawall Road, Cardiff, CF24 5TH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	599	9	320866 176368
186	Points of Interest - Commercial Services Name: C J's Accident Repair Location: 85 Seawall Road, Cardiff, CF24 5TH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	599	9	320866 176367
187	Points of Interest - Commercial Services Name: E-pro Automotive Location: Unit 1 Darby Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	590	9	321095 175835
187	Points of Interest - Commercial Services Name: B & R Garages Location: Unit 1A Darby Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	590	9	321095 175835
187	Points of Interest - Commercial Services Name: 1st Choice Vehicles Location: Unit 12-13 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (SW)	599	9	321148 175787

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
187	Points of Interest - Commercial Services Name: 1st Choice Vehicle Dismantlers Location: Unit 12-13 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A8NW (SW)	599	9	321148 175787
187	Points of Interest - Commercial Services Name: National Engine Centre Ltd Location: Unit 1 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	612	9	321089 175812
188	Points of Interest - Commercial Services Name: Scrap Yard Location: CF24 Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A7NE (SW)	683	9	321102 175717
188	Points of Interest - Commercial Services Name: Scrap Yard Location: Not Supplied Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	687	9	321101 175713
188	Points of Interest - Commercial Services Name: Panel Shop Location: Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A7NE (SW)	699	9	321095 175703
189	Points of Interest - Commercial Services Name: Torque Motors Ltd Location: Seawall Road, Cardiff, CF24 5TH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NW (W)	703	9	320767 176411
190	Points of Interest - Commercial Services Name: Action Recycling Ltd Location: Unit 6 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A7NE (SW)	716	9	320989 175760
190	Points of Interest - Commercial Services Name: Action Recycling Ltd Location: Unit 6 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A7NE (SW)	716	9	320989 175760
190	Points of Interest - Commercial Services Name: Body & Soul Autoworks Location: Unit 3 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	752	9	320965 175733
190	Points of Interest - Commercial Services Name: Itel Supplies Ltd Location: Unit 2 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A7NE (SW)	765	9	320965 175715
190	Points of Interest - Commercial Services Name: C & B Car Repair Location: Unit 1c Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	775	9	320960 175707
190	Points of Interest - Commercial Services Name: Cardiff MOT Centre Location: Unit 1c Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	775	9	320960 175707

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
190	Points of Interest - Commercial Services Name: E-pro Automotive Ltd Location: Unit 1 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	776	9	320960 175706
191	Points of Interest - Commercial Services Name: Shield Environmental Services Ltd Location: Unit 11 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A8SW (SW)	762	9	321152 175602
192	Points of Interest - Commercial Services Name: Monier Redland Ltd Location: Unit 1 Pacific Business Park, Pacific Road, Cardiff, CF24 5HJ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7NW (SW)	855	9	320727 175859
193	Points of Interest - Commercial Services Name: South West Wood Products Ltd Location: Unit A4 Compass Business Park, Pacific Road, Cardiff, CF24 5HL Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A7NW (SW)	866	9	320668 175949
194	Points of Interest - Commercial Services Name: Car Wash Location: Ffordd Pengam, Cardiff, CF24 2HP Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A18NE (N)	956	9	321625 177239
194	Points of Interest - Commercial Services Name: Tesco Cardiff Pengam Extra Location: Ffordd Pengam, Cardiff, CF24 2HP Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A18NE (N)	964	9	321612 177249
195	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	145	9	321337 176373
195	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	160	9	321315 176362
196	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	157	9	321336 176393
196	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	164	9	321319 176380
196	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	171	9	321357 176433
196	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	175	9	321367 176445

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
196	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	218	9	321323 176466
196	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A13NW (NW)	221	9	321348 176488
196	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	247	9	321365 176525
197	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13NW (N)	159	9	321423 176452
198	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (N)	194	9	321513 176484
198	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (N)	195	9	321518 176484
199	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	280	9	321205 176411
200	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (N)	291	9	321511 176584
200	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A13NE (N)	301	9	321496 176596
200	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13NW (N)	329	9	321453 176626
200	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13NW (N)	336	9	321458 176633
201	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	302	9	321260 176073

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
202	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NW (S)	367	9	321337 175953
202	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NW (S)	375	9	321376 175933
202	Points of Interest - Manufacturing and Production Name: Tanks Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A8NW (S)	376	9	321370 175934
202	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NW (S)	433	9	321307 175894
202	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NW (S)	440	9	321347 175873
203	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	375	9	321086 176282
204	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NW (S)	408	9	321454 175891
204	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NE (S)	430	9	321493 175870
204	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NW (S)	468	9	321426 175832
204	Points of Interest - Manufacturing and Production Name: Tanks Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A8NW (S)	468	9	321429 175832
204	Points of Interest - Manufacturing and Production Name: Cardiff Waste Water Treatment - Sewage Sludge Digestion (DECC) Location: Tide Fields Road, Splott, Cardiff, CF24 Category: Industrial Features Class Code: Energy Production Positional Accuracy: Positioned to an adjacent address or location	A8NW (S)	474	9	321361 175835
204	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NE (S)	486	9	321464 175812

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
204	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NW (S)	521	9	321373 175785
204	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NW (S)	545	9	321434 175754
205	Points of Interest - Manufacturing and Production Name: Tanks Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	424	9	321045 176377
206	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12SE (SW)	458	9	321041 176115
206	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	529	9	320969 176103
207	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	459	9	321012 176391
207	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	515	9	320947 176335
207	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	515	9	320947 176336
207	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	530	9	320940 176395
207	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	542	9	320926 176382
207	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12NE (W)	577	9	320891 176387
207	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12NE (W)	579	9	320889 176384

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
207	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12NE (W)	579	9	320889 176390
207	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12NE (W)	583	9	320885 176386
207	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12SE (W)	587	9	320874 176289
207	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	597	9	320868 176362
207	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	597	9	320868 176362
208	Points of Interest - Manufacturing and Production Name: Shaft Location: CF24 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A18SE (NE)	469	9	321771 176649
209	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12SE (SW)	499	9	321034 176040
209	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12SE (SW)	543	9	321025 175974
209	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12SE (SW)	548	9	321012 175984
210	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	513	9	320972 176452
210	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	513	9	320972 176452
210	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	540	9	320938 176431

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
211	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NW (S)	564	9	321353 175745
211	Points of Interest - Manufacturing and Production Name: Tanks Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A8NW (S)	574	9	321361 175733
211	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NW (S)	622	9	321325 175691
211	Points of Interest - Manufacturing and Production Name: Shaft Location: CF24 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A8NW (S)	626	9	321263 175704
211	Points of Interest - Manufacturing and Production Name: Tanks Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A8NW (S)	634	9	321331 175678
211	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NW (S)	643	9	321380 175661
211	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NW (S)	663	9	321307 175653
211	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8SW (S)	685	9	321364 175620
212	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A8NW (S)	586	9	321413 175714
213	Points of Interest - Manufacturing and Production Name: Tanks Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	590	9	320871 176290
213	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12SE (W)	591	9	320870 176286
213	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	627	9	320835 176324

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
213	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	627	9	320835 176324
214	Points of Interest - Manufacturing and Production Name: Tanks Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	592	9	320876 176389
214	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	618	9	320858 176432
214	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	618	9	320858 176432
214	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	642	9	320825 176383
214	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	642	9	320825 176383
214	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	653	9	320826 176452
214	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	654	9	320826 176453
215	Points of Interest - Manufacturing and Production Name: Ready-Mixed Concrete Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	609	9	321047 175852
216	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	639	9	320923 175953
216	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	639	9	320923 175954
216	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	676	9	320927 175884

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
216	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	697	9	320858 175949
217	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	649	9	320848 176084
218	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A12NE (W)	672	9	320796 176392
218	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	674	9	320794 176394
218	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	682	9	320781 176350
218	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	700	9	320775 176439
218	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	710	9	320761 176417
218	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	710	9	320761 176417
218	Points of Interest - Manufacturing and Production Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	741	9	320725 176387
218	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	741	9	320738 176458
218	Points of Interest - Manufacturing and Production Name: Factory Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	741	9	320725 176387
219	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	707	9	320756 176349

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
219	Points of Interest - Manufacturing and Production Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	770	9	320691 176303
219	Points of Interest - Manufacturing and Production Name: Works Location: CF24 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	776	9	320685 176302
220	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A8NW (SW)	736	9	321159 175627
220	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A8NW (SW)	741	9	321141 175630
220	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A7SE (SW)	777	9	321120 175600
221	Points of Interest - Manufacturing and Production Name: Tremorfa Industrial Estate Location: CF24 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	740	9	320986 175731
222	Points of Interest - Manufacturing and Production Name: Tank Location: CF24 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	770	9	320890 175781
223	Points of Interest - Manufacturing and Production Name: Stonechina Location: Unit 9 Pacific Business Park, Pacific Road, Cardiff, CF24 5HJ Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A7NW (SW)	855	9	320727 175859
223	Points of Interest - Manufacturing and Production Name: Stonechina Location: Unit 9 Pacific Business Park, Pacific Road, Cardiff, CF24 5HJ Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A7NW (SW)	855	9	320727 175859
224	Points of Interest - Manufacturing and Production Name: Shaft Location: CF24 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A7SE (SW)	897	9	320941 175567
225	Points of Interest - Manufacturing and Production Name: Dawson Stone Masonry Ltd Location: Unit 12 Pacific Business Park, Pacific Road, Cardiff, CF24 5HJ Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A12SW (W)	924	9	320598 175968
226	Points of Interest - Manufacturing and Production Name: Portmanmoor Road Industrial Estate Location: CF24 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	973	9	320525 176031

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
227	Points of Interest - Public Infrastructure Name: Cleanaway Ltd Location: Rover Way, Cardiff, CF24 5UX Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A13NW (N)	95	9	321459 176392
228	Points of Interest - Public Infrastructure Name: Slag Heap Location: CF24 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	160	9	321372 176165
229	Points of Interest - Public Infrastructure Name: Cleanaway Ltd Location: Rover Way, Cardiff, CF24 2RX Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A13SW (SW)	346	9	321165 176118
230	Points of Interest - Public Infrastructure Name: Outfall Location: CF24 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A14NW (NE)	548	9	321946 176552
231	Points of Interest - Public Infrastructure Name: Action Recycling Ltd Location: Unit 6 Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff, CF24 5SD Category: Infrastructure and Facilities Class Code: Recycling Centres Positional Accuracy: Positioned to address or location	A7NE (SW)	716	9	320989 175760
232	Points of Interest - Public Infrastructure Name: Tesco Cardiff Pengam Extra Location: Ffordd Pengam, Cardiff, CF24 2HP Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A18NE (N)	956	9	321625 177239
233	Points of Interest - Public Infrastructure Name: Coffey Dam Location: CF10 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A7SE (SW)	965	9	320911 175505
233	Points of Interest - Public Infrastructure Name: Main Sewer Outfall Location: CF10 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A7SE (SW)	994	9	320951 175445
234	Points of Interest - Recreational and Environmental Name: Splott Park Location: South Park Road, Cardiff, South Glamorgan, CF24 2LU Category: Recreational Class Code: Municipal Parks And Gardens Positional Accuracy: Positioned to address or location	A17SW (NW)	913	9	320681 176773
235	Points of Interest - Recreational and Environmental Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A17SW (NW)	942	9	320611 176703
235	Points of Interest - Recreational and Environmental Name: Playground Location: Moorland Road, CF24 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A17SW (NW)	942	9	320612 176705

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
236	Ramsar Sites Name: Severn Estuary (Wales) Multiple Areas: Y Total Area (m2): 68891898.01 Source: Natural Resources Wales Reference: UK11081 Designation Date: 13th July 1995	A13SE (SE)	328	2	321667 176043
237	Sites of Special Scientific Interest Name: Severn Estuary Multiple Areas: Y Total Area (m2): 68537733.72 Source: Natural Resources Wales Reference: 46133wgx Designation Details: Biological Designation Date: 1st January 1976 Date Type: Notified	A13SE (SE)	328	2	321667 176043
238	Special Areas of Conservation Name: Severn Estuary (Wales) Multiple Areas: N Total Area (m2): 267698780.64 Source: Natural Resources Wales Reference: UK0013030 Status: Designated	A13SE (SE)	328	2	321667 176043
239	Special Protection Areas Name: Severn Estuary (Wales) Multiple Areas: Y Total Area (m2): 68891897.65 Source: Natural Resources Wales Reference: UK9015022 Designation Date: 13th July 1995	A13SE (SE)	328	2	321667 176043

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices Vale Of Glamorgan County Borough Council - Environmental Health Department Newport City Council - Public Protection and Environmental Services Cardiff Council - Pollution Control Division	April 2014 January 2015 October 2017	Annual Rolling Update Annual Rolling Update Annual Rolling Update
Discharge Consents Environment Agency - Welsh Region Natural Resources Wales	August 2014 January 2019	Quarterly Quarterly
Enforcement and Prohibition Notices Environment Agency - Welsh Region	March 2013	Annual Rolling Update
Integrated Pollution Controls Environment Agency - Welsh Region	October 2008	Variable
Integrated Pollution Prevention And Control Environment Agency - Welsh Region Natural Resources Wales	January 2019 January 2019	Quarterly Quarterly
Local Authority Integrated Pollution Prevention And Control Newport City Council - Public Protection and Environmental Services Vale Of Glamorgan County Borough Council - Environmental Health Department Cardiff Council - Pollution Control Division	June 2014 June 2014 March 2016	Variable Variable Variable
Local Authority Pollution Prevention and Controls Newport City Council - Public Protection and Environmental Services Vale Of Glamorgan County Borough Council - Environmental Health Department Cardiff Council - Pollution Control Division	June 2014 June 2014 March 2016	Annual Rolling Update Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements Newport City Council - Public Protection and Environmental Services Vale Of Glamorgan County Borough Council - Environmental Health Department Cardiff Council - Pollution Control Division	June 2014 June 2014 March 2016	Variable Variable Variable
Nearest Surface Water Feature Ordnance Survey	January 2019	
Pollution Incidents to Controlled Waters Environment Agency - Welsh Region	December 1998	Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - Welsh Region Natural Resources Wales	March 2013 March 2013	Annual Rolling Update Annual Rolling Update
Prosecutions Relating to Controlled Waters Environment Agency - Welsh Region Natural Resources Wales	March 2013 March 2013	Annual Rolling Update Annual Rolling Update
Registered Radioactive Substances Natural Resources Wales Environment Agency - Welsh Region	January 2015 June 2016	Annually
River Quality Environment Agency - Head Office	November 2001	Not Applicable
Substantiated Pollution Incident Register Environment Agency Wales - South East Area Natural Resources Wales	January 2019 October 2018	Quarterly Quarterly
Water Abstractions Natural Resources Wales Environment Agency - Welsh Region	February 2019 January 2019	Quarterly Quarterly
Water Industry Act Referrals Natural Resources Wales Environment Agency - Welsh Region	January 2019 October 2017	Quarterly Quarterly
Groundwater Vulnerability Environment Agency - Head Office	April 2015	Not Applicable

Agency & Hydrological	Version	Update Cycle
Drift Deposits Environment Agency - Head Office	January 1999	Not Applicable
Bedrock Aquifer Designations Natural Resources Wales	January 2018	Annually
Superficial Aquifer Designations Natural Resources Wales	January 2018	Annually
Source Protection Zones Natural Resources Wales	November 2016	Annual Rolling Update
Extreme Flooding from Rivers or Sea without Defences Natural Resources Wales	February 2019	Quarterly
Flooding from Rivers or Sea without Defences Natural Resources Wales	February 2019	Quarterly
Areas Benefiting from Flood Defences Natural Resources Wales	February 2019	Quarterly
Flood Water Storage Areas Natural Resources Wales	February 2019	Quarterly
Flood Defences Natural Resources Wales	February 2019	Quarterly
OS Water Network Lines Ordnance Survey	October 2018	Quarterly
Surface Water 1 in 30 year Flood Extent Natural Resources Wales	October 2013	Annually
Surface Water 1 in 100 year Flood Extent Natural Resources Wales	October 2013	Annually
Surface Water 1 in 1000 year Flood Extent Natural Resources Wales	October 2013	Annually
Surface Water Suitability Natural Resources Wales	October 2013	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	Annually

Waste	Version	Update Cycle
BGS Recorded Landfill Sites British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites Natural Resources Wales	July 2017	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - Welsh Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency Wales - South East Area Natural Resources Wales	July 2018 July 2018	Quarterly Quarterly
Licensed Waste Management Facilities (Locations) Environment Agency Wales - South East Area Natural Resources Wales	January 2019 January 2019	Quarterly Quarterly
Local Authority Landfill Coverage Cardiff Council Newport City Council Vale Of Glamorgan County Borough Council	May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable
Local Authority Recorded Landfill Sites Cardiff Council Newport City Council Vale Of Glamorgan County Borough Council	May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable
Potentially Infilled Land (Non-Water) Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water) Landmark Information Group Limited	December 1999	Not Applicable
Registered Landfill Sites Environment Agency Wales - South East Area	March 2003	Not Applicable
Registered Waste Transfer Sites Environment Agency Wales - South East Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency Wales - South East Area	March 2003	Not Applicable
Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH) Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements Vale Of Glamorgan County Borough Council - Planning Department Cardiff Council - Regulatory Services Newport City Council - Planning Department	January 2016 October 2015 October 2015	Variable Variable Variable
Planning Hazardous Substance Consents Vale Of Glamorgan County Borough Council - Planning Department Cardiff Council - Regulatory Services Newport City Council - Planning Department	January 2016 October 2015 October 2015	Variable Variable Variable

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	November 2018	Bi-Annually
BGS Urban Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Urban Soil Chemistry Averages British Geological Survey - National Geoscience Information Service	October 2015	Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	Annually

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	January 2019	Quarterly
Fuel Station Entries Catalist Ltd - Experian	March 2019	Quarterly
Gas Pipelines National Grid	July 2014	
Points of Interest - Commercial Services PointX	November 2018	Quarterly
Points of Interest - Education and Health PointX	November 2018	Quarterly
Points of Interest - Manufacturing and Production PointX	November 2018	Quarterly
Points of Interest - Public Infrastructure PointX	November 2018	Quarterly
Points of Interest - Recreational and Environmental PointX	November 2018	Quarterly
Underground Electrical Cables National Grid	December 2015	

Sensitive Land Use	Version	Update Cycle
Ancient Woodland Natural Resources Wales	August 2018	Bi-Annually
Areas of Adopted Green Belt Cardiff Council Newport City Council	August 2018 August 2018	As notified As notified
Areas of Unadopted Green Belt Cardiff Council Newport City Council	August 2018 August 2018	As notified As notified
Areas of Outstanding Natural Beauty Natural Resources Wales	August 2018	Bi-Annually
Environmentally Sensitive Areas The National Assembly for Wales - GI Services (Department of Planning & Countryside)	January 2017	
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Cardiff Council Newport City Council Vale Of Glamorgan County Borough Council	August 2018 August 2018 August 2018	Bi-Annually Bi-Annually Bi-Annually
Marine Nature Reserves Natural Resources Wales	August 2018	Bi-Annually
National Nature Reserves Natural Resources Wales	August 2018	Bi-Annually
National Parks Natural Resources Wales	August 2018	Annually
Nitrate Vulnerable Zones Natural Resources Wales The National Assembly for Wales - GI Services (Department of Planning & Countryside)	July 2017 October 2005	Bi-Annually
Ramsar Sites Natural Resources Wales	February 2019	Bi-Annually
Sites of Special Scientific Interest Natural Resources Wales	February 2018	Bi-Annually
Special Areas of Conservation Natural Resources Wales	August 2018	Bi-Annually
Special Protection Areas Natural Resources Wales	August 2018	Bi-Annually

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
Centre for Ecology and Hydrology	 Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Peter Brett Associates	

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Natural Resources Wales Ty Cambria, 29 Newport Road, Cardiff, CF24 0TP	Telephone: 0300 065 3000 Email: enquiries@naturalresourceswales.gov.uk
3	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
4	Cardiff Council - Pollution Control Division Regulatory Services, City Hall, Cardiff, Mid Glamorgan, CF10 3ND	Telephone: 029 20872000 Fax: 01222 873212 Website: www.cardiff.gov.uk
5	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
6	Cardiff Council County Hall, Atlantic Wharf, Cardiff, Mid Glamorgan, CF1 5UW	Telephone: 029 2087 2000 Fax: 029 2087 3212 Website: www.cardiff.gov.uk
7	Health and Safety Executive 5S.2 Redgrave Court, Merton Road, Bootle, L20 7HS	Website: www.hse.gov.uk
8	Cardiff Council - Regulatory Services Room 158, City Hall, Cardiff, Mid Glamorgan, CF10 3ND	Telephone: 029 20872429 Fax: 029 2087 2597 Website: www.cardiff.gov.uk
9	PointX 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

Historical Mapping Legends

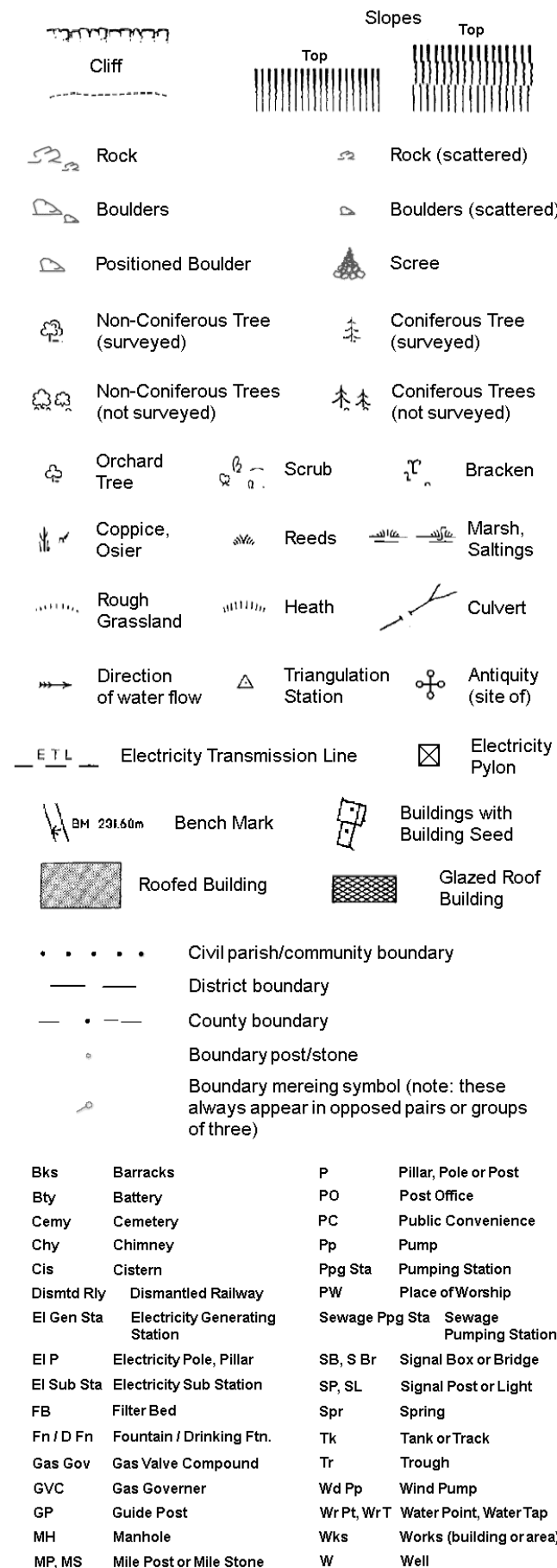
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



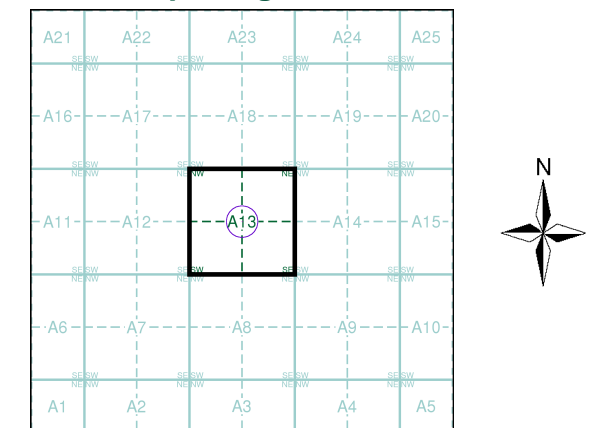
Large-Scale National Grid Data 1:2,500 and 1:1,250



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:2,500	1880	2
Glamorganshire	1:2,500	1901	3
Glamorganshire	1:2,500	1919	4
Glamorganshire	1:2,500	1942	5
Ordnance Survey Plan	1:1,250	1957	6
Ordnance Survey Plan	1:2,500	1957 - 1969	7
Ordnance Survey Plan	1:1,250	1966 - 1969	8
Ordnance Survey Plan	1:2,500	1970	9
Supply of Unpublished Survey Information	1:1,250	1973	10
Additional SIMs	1:1,250	1977 - 1988	11
Additional SIMs	1:2,500	1987	12
Additional SIMs	1:1,250	1987 - 1988	13
Large-Scale National Grid Data	1:2,500	1992	14
Large-Scale National Grid Data	1:1,250	1992	15
Large-Scale National Grid Data	1:1,250	1993 - 1995	16
Large-Scale National Grid Data	1:2,500	1993	17
Large-Scale National Grid Data	1:1,250	1994	18
Historical Aerial Photography	1:2,500	2009	19

Historical Map - Segment A13



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

Site at 321450, 176300

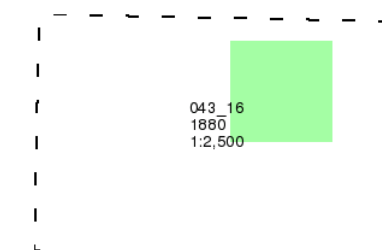


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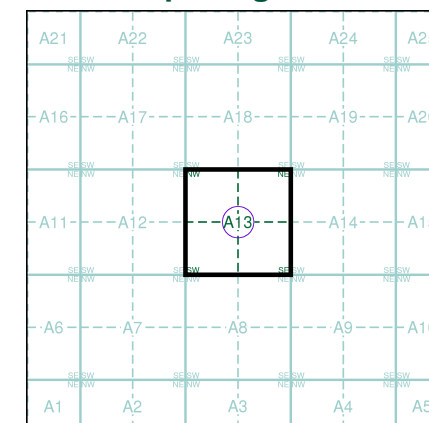


The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 197133902_1_1
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National Grid Reference: 321460, 176300
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Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

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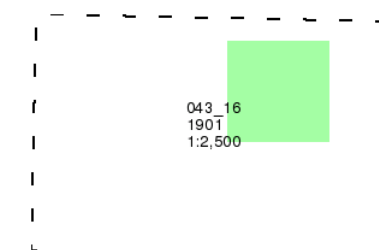
Glamorganshire

Published 1901

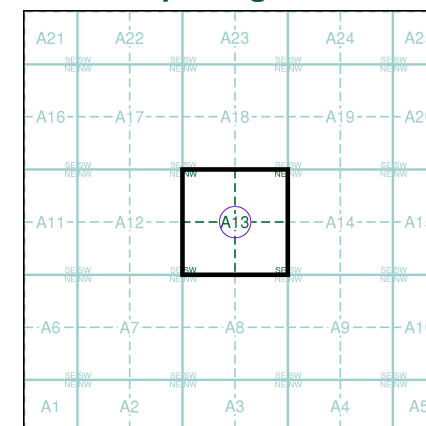
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

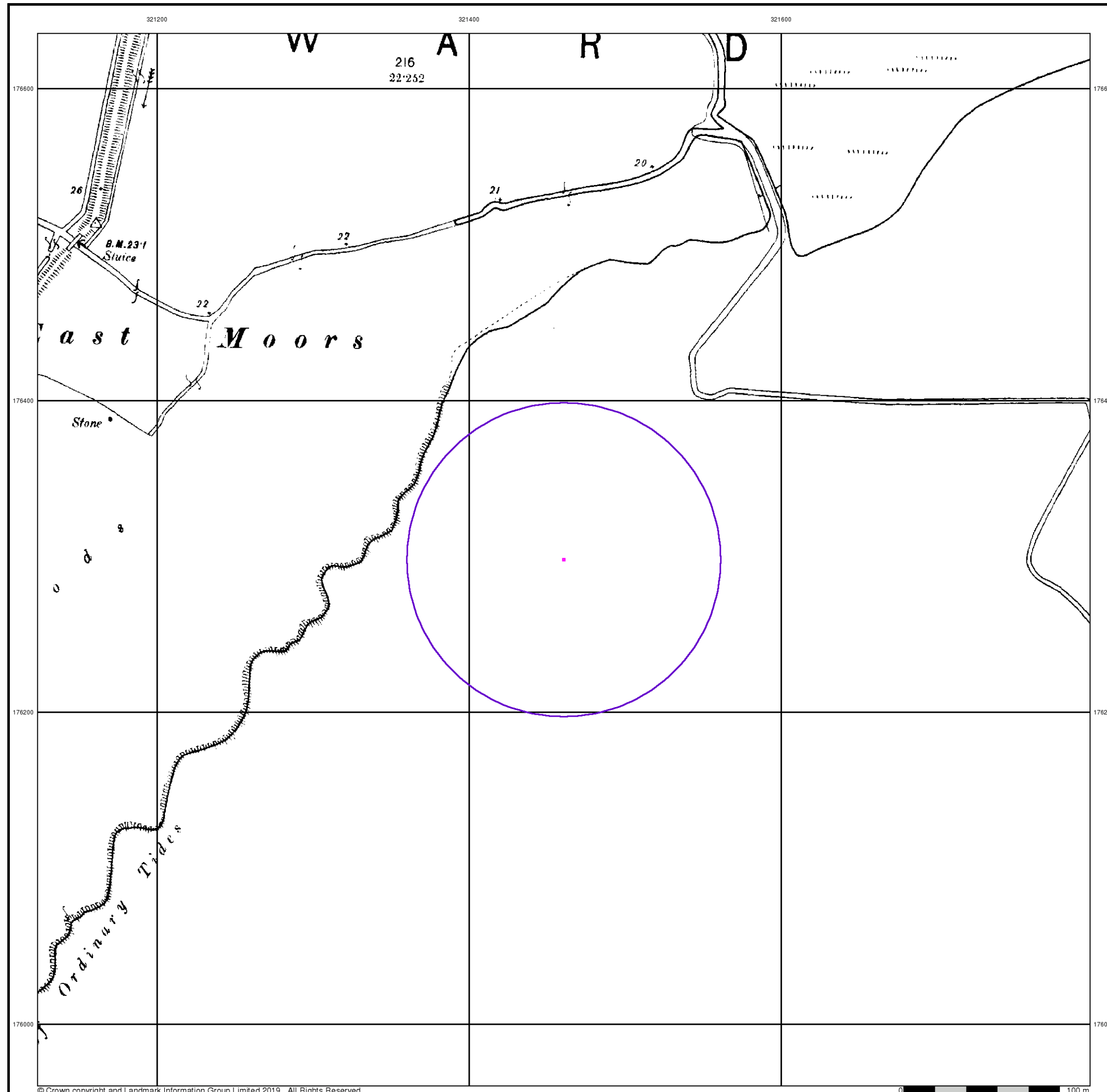
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Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

Site at 321450, 176300



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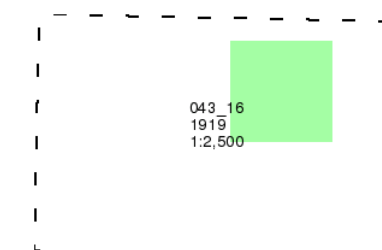
Glamorganshire

Published 1919

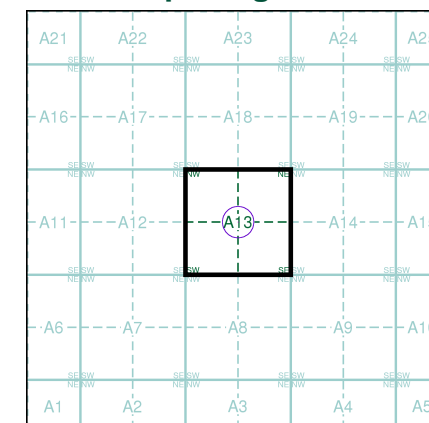
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Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

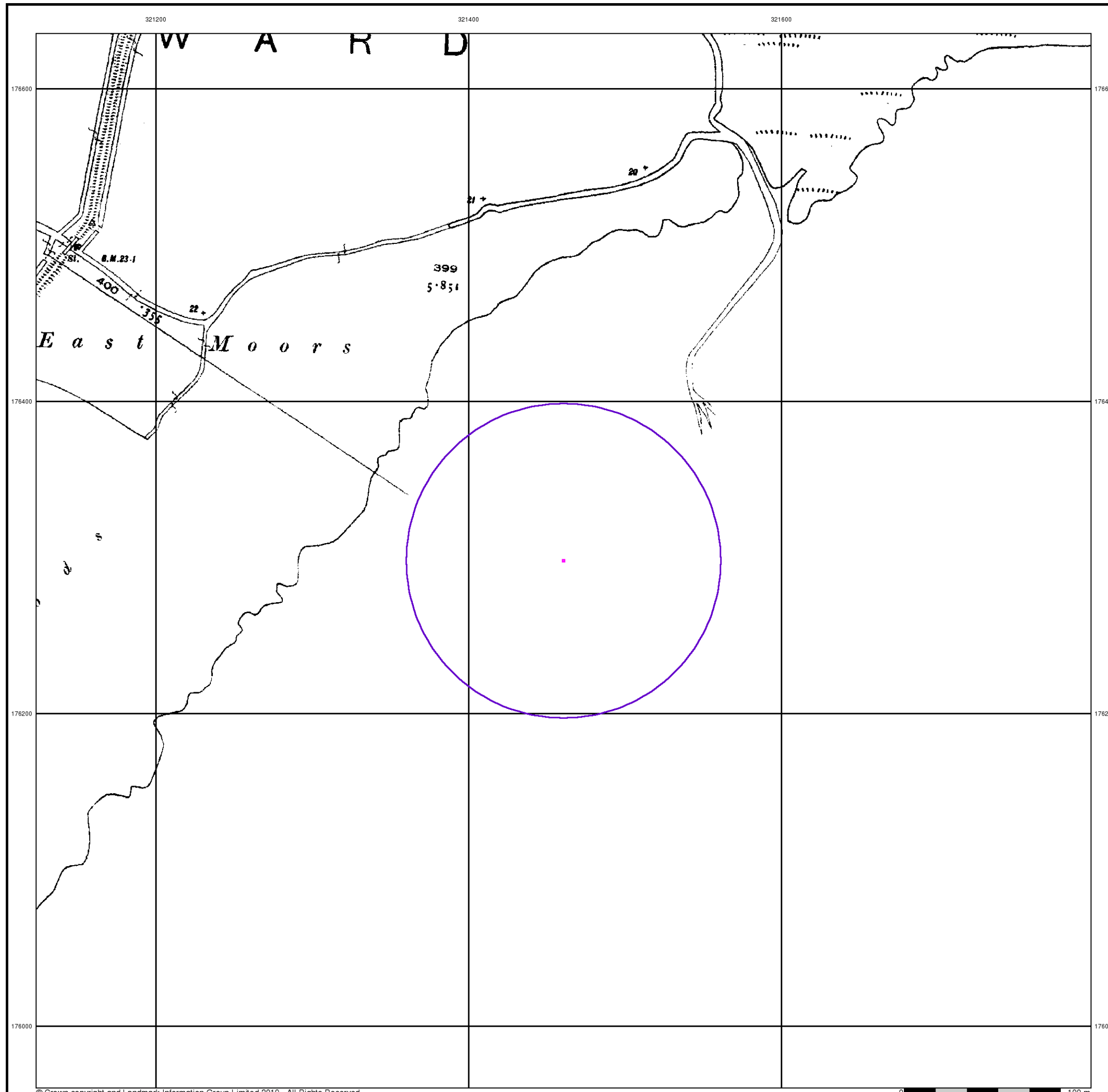
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Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

Site at 321450, 176300



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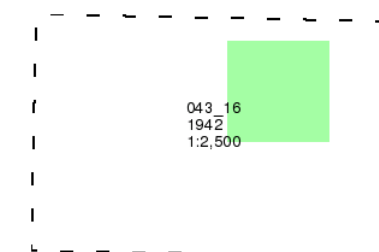
Glamorganshire

Published 1942

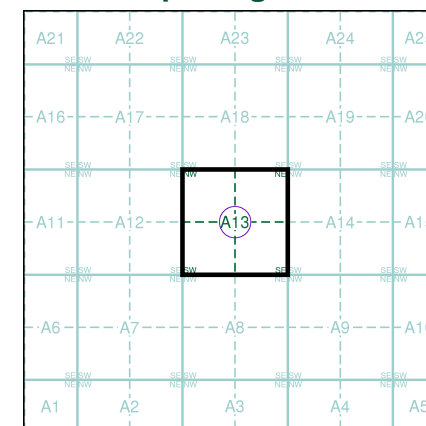
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

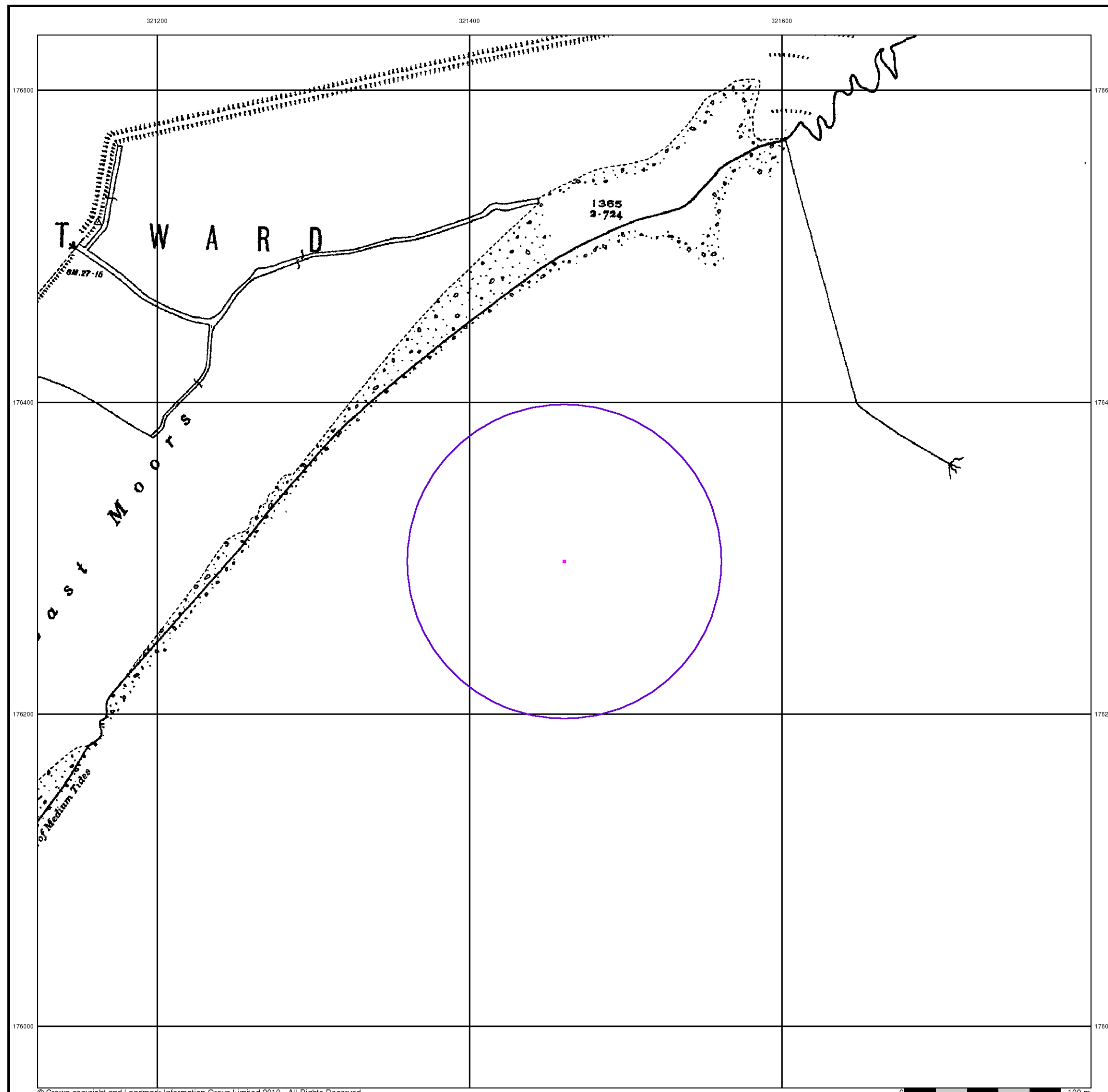
Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

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Ordnance Survey Plan

Published 1957

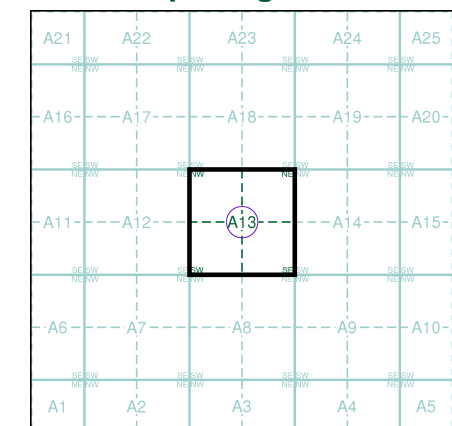
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

ST2176NW 1957 1:1,250	ST2176NE 1957 1:1,250
ST2176SW 1957 1:1,250	ST2176SE 1957 1:1,250

Historical Map - Segment A13



Order Details

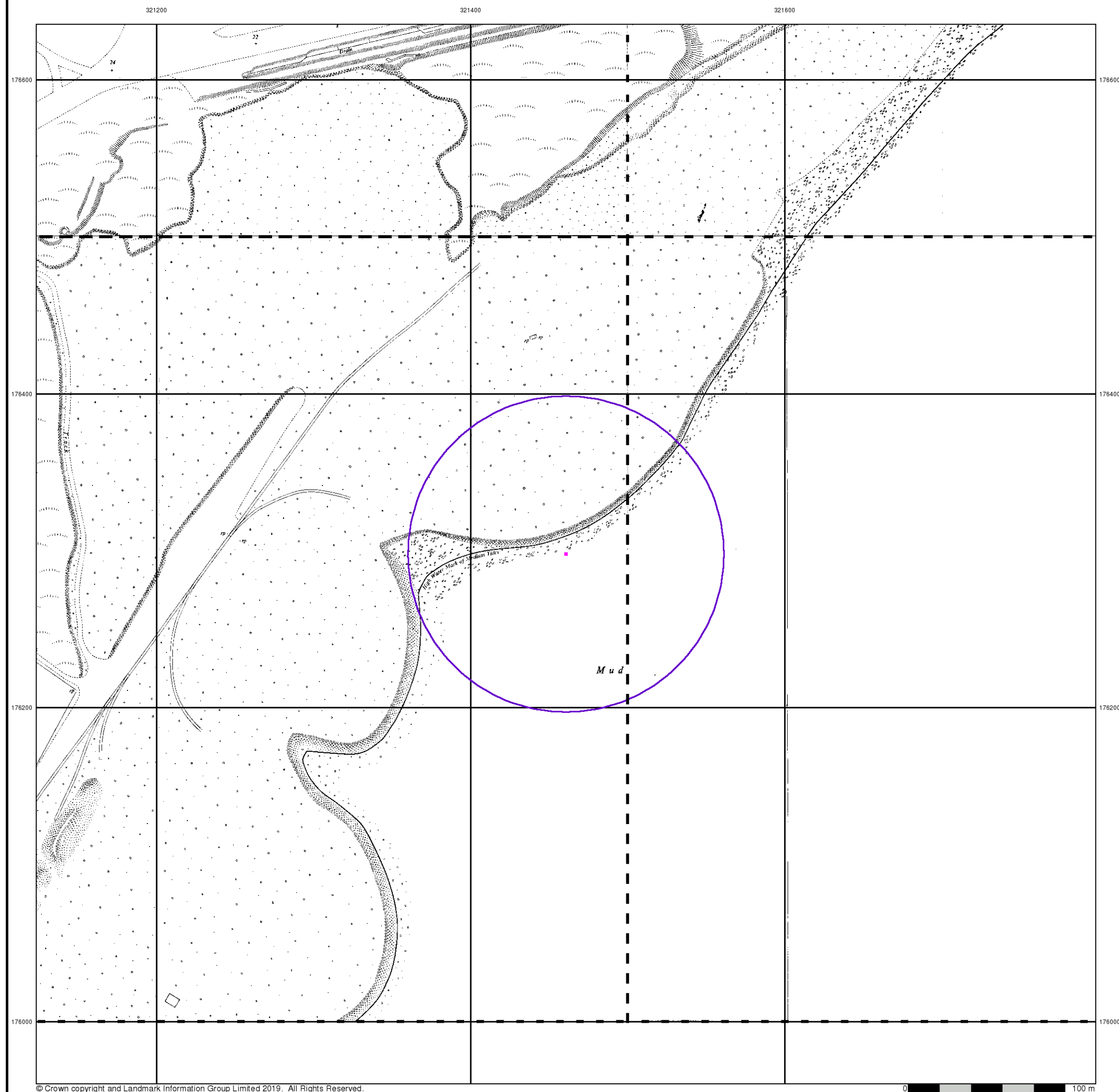
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Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

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Ordnance Survey Plan

Published 1957 - 1969

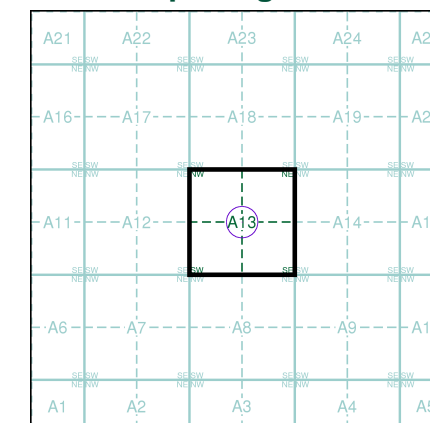
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

ST2176
1957
1:2,500
ST2175
1969
1:2,500

Historical Map - Segment A13



Order Details

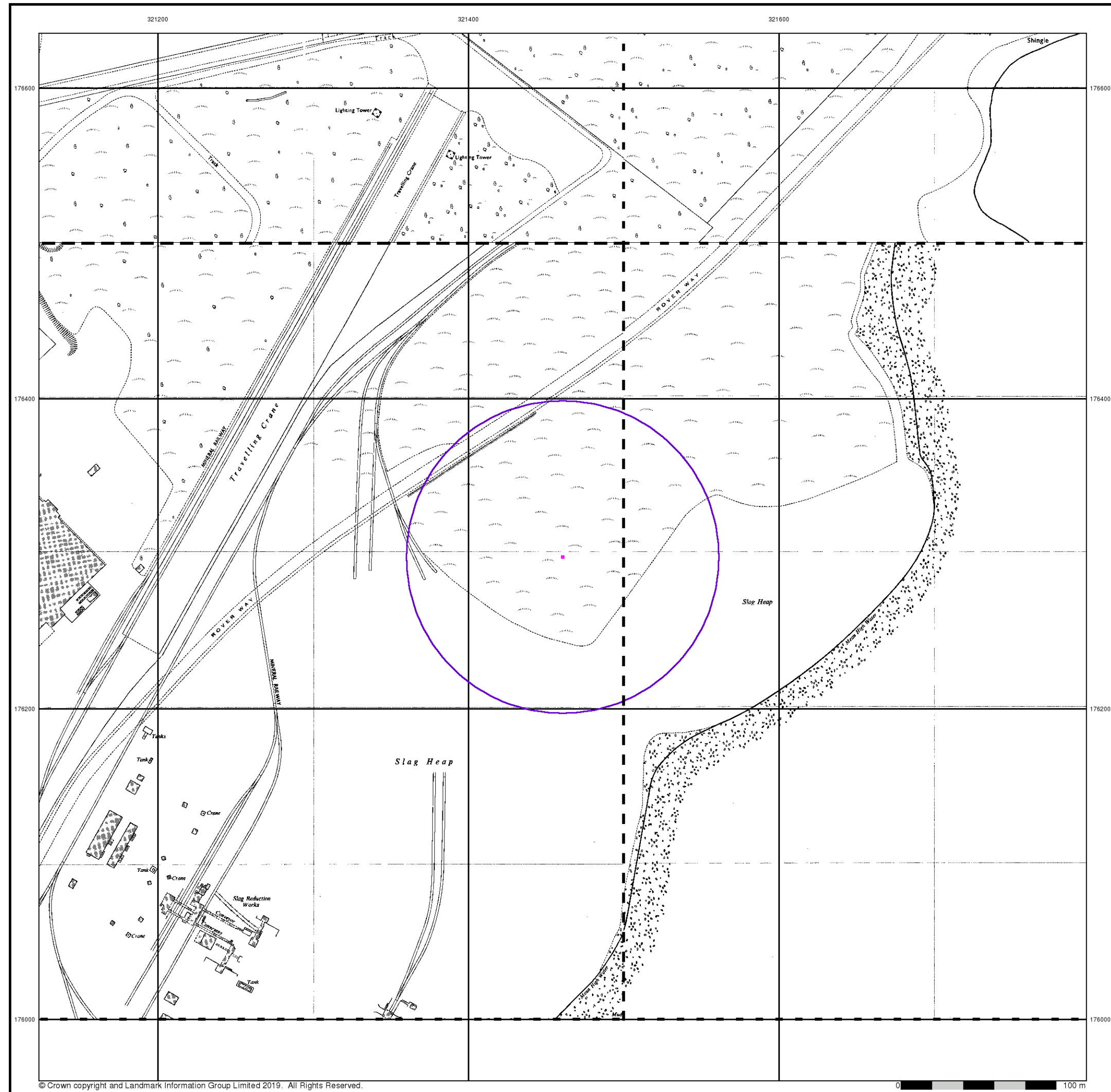
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Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

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Ordnance Survey Plan

Published 1966 - 1969

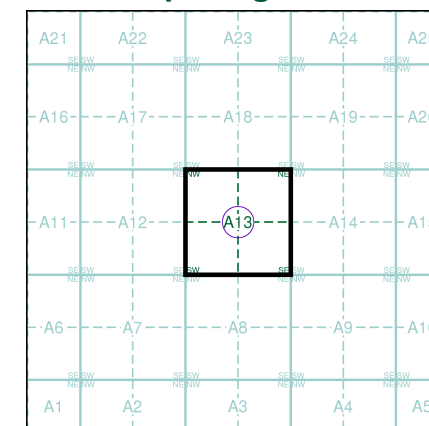
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

ST2176NW 1969 1:1,250	ST2176NE 1969 1:1,250
ST2176SW 1966 1:1,250	ST2176SE 1966 1:1,250

Historical Map - Segment A13



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

Site at 321450, 176300



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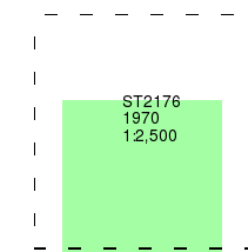
Ordnance Survey Plan

Published 1970

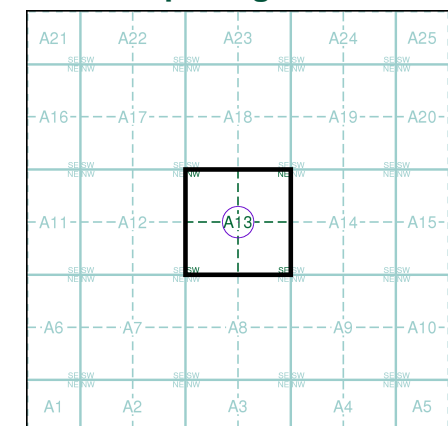
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

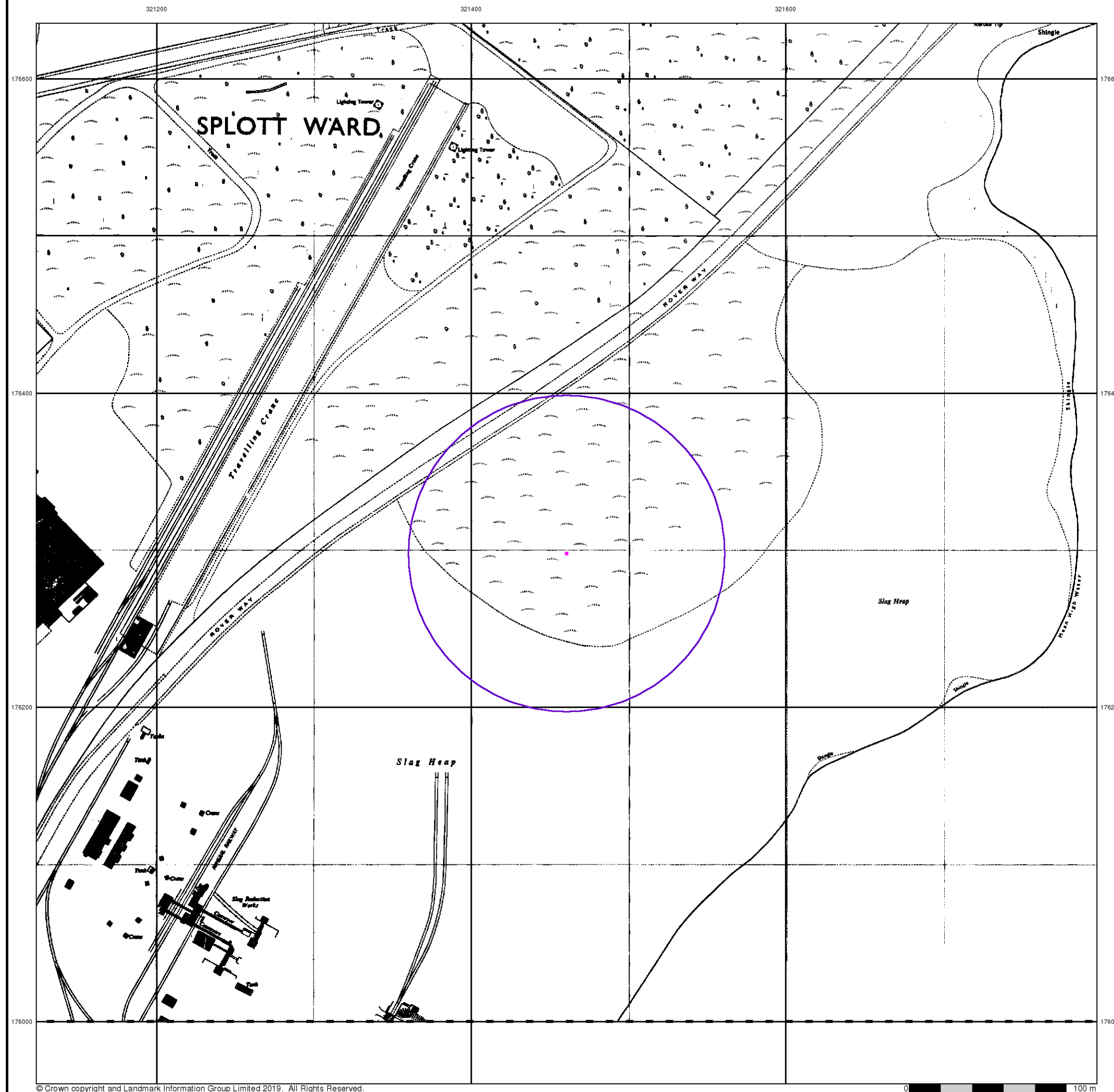
Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

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Supply of Unpublished Survey Information

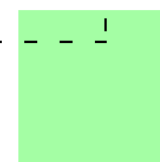
Published 1973

Source map scale - 1:1,250

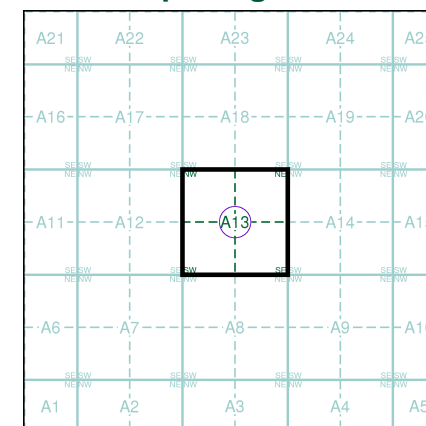
SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a 'work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

ST2176NW
1973
1:1,250



Historical Map - Segment A13



Order Details

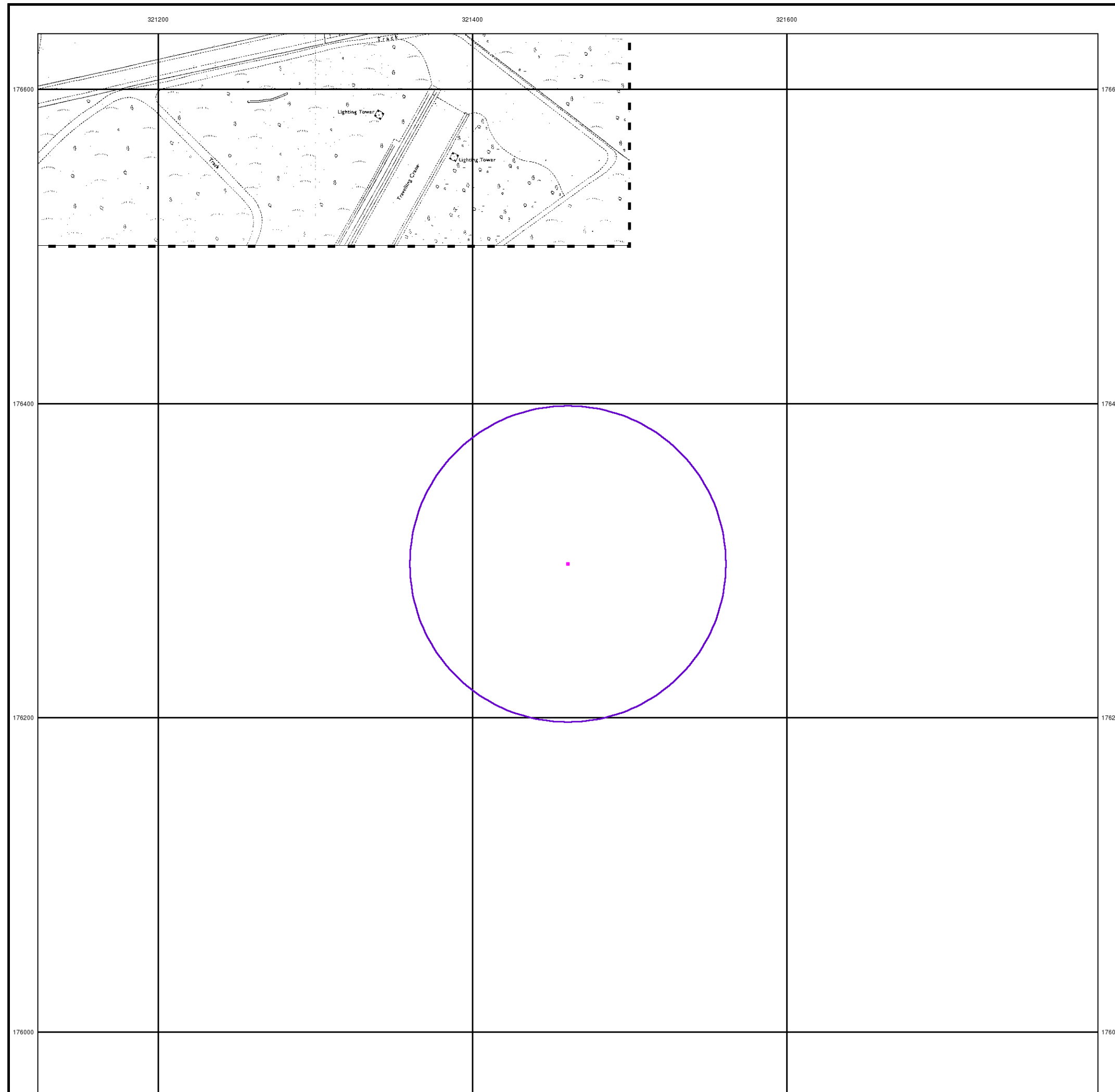
Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

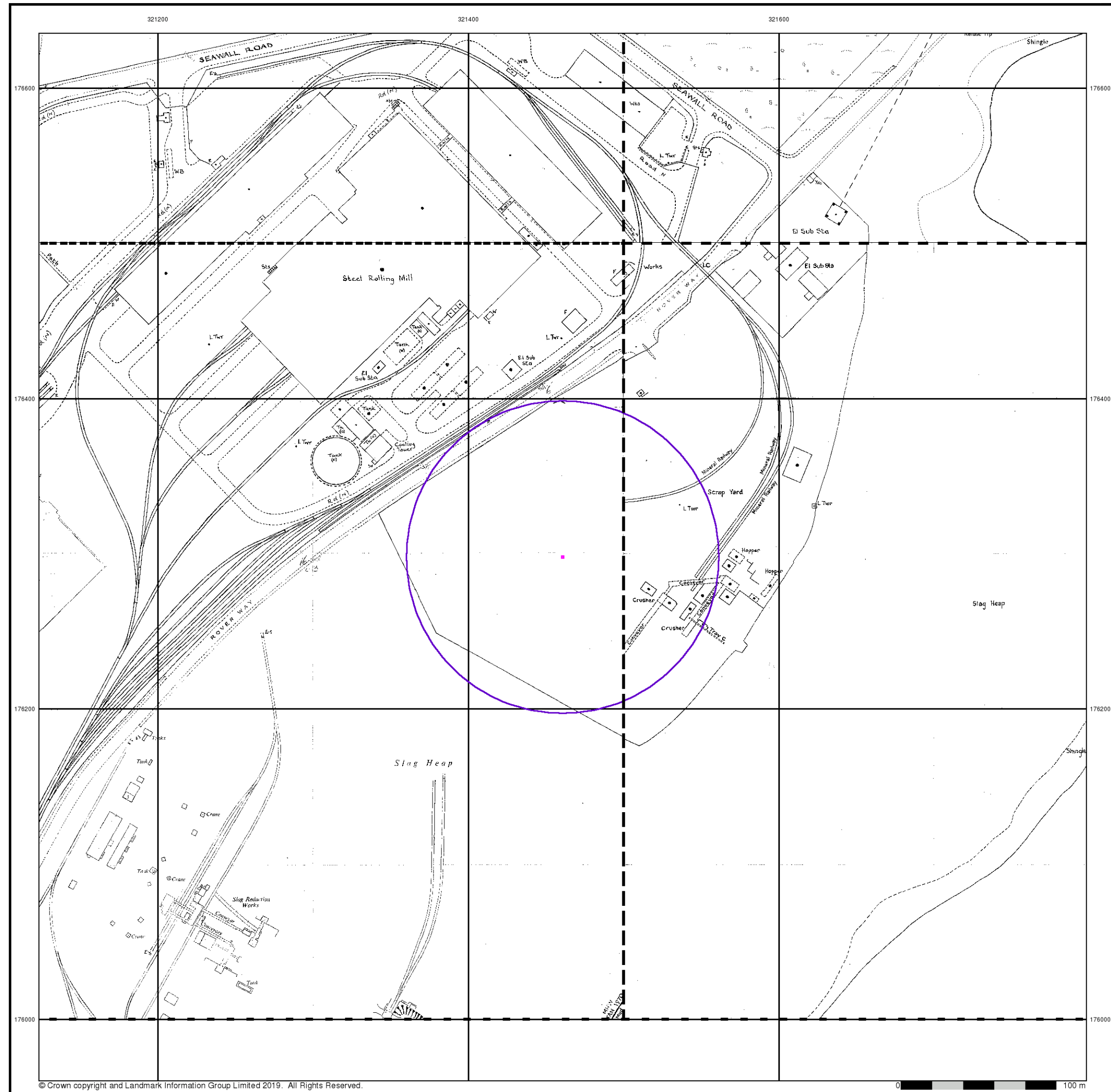
Site Details

Site at 321450, 176300

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0 100 m



terrafirma

Additional SIMs

Published 1977 - 1988

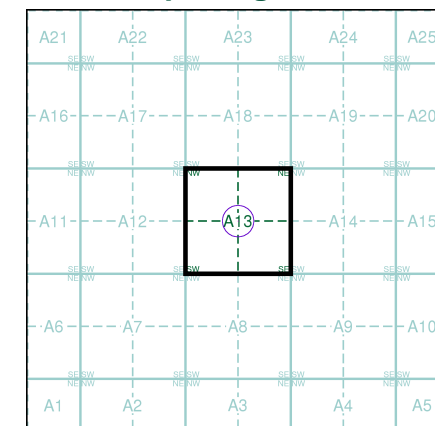
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

ST2176NW 1977 1:1,250	ST2176NE 1977 1:1,250
ST2176SW 1977 1:1,250	ST2176SE 1988 1:1,250

Historical Map - Segment A13



Order Details

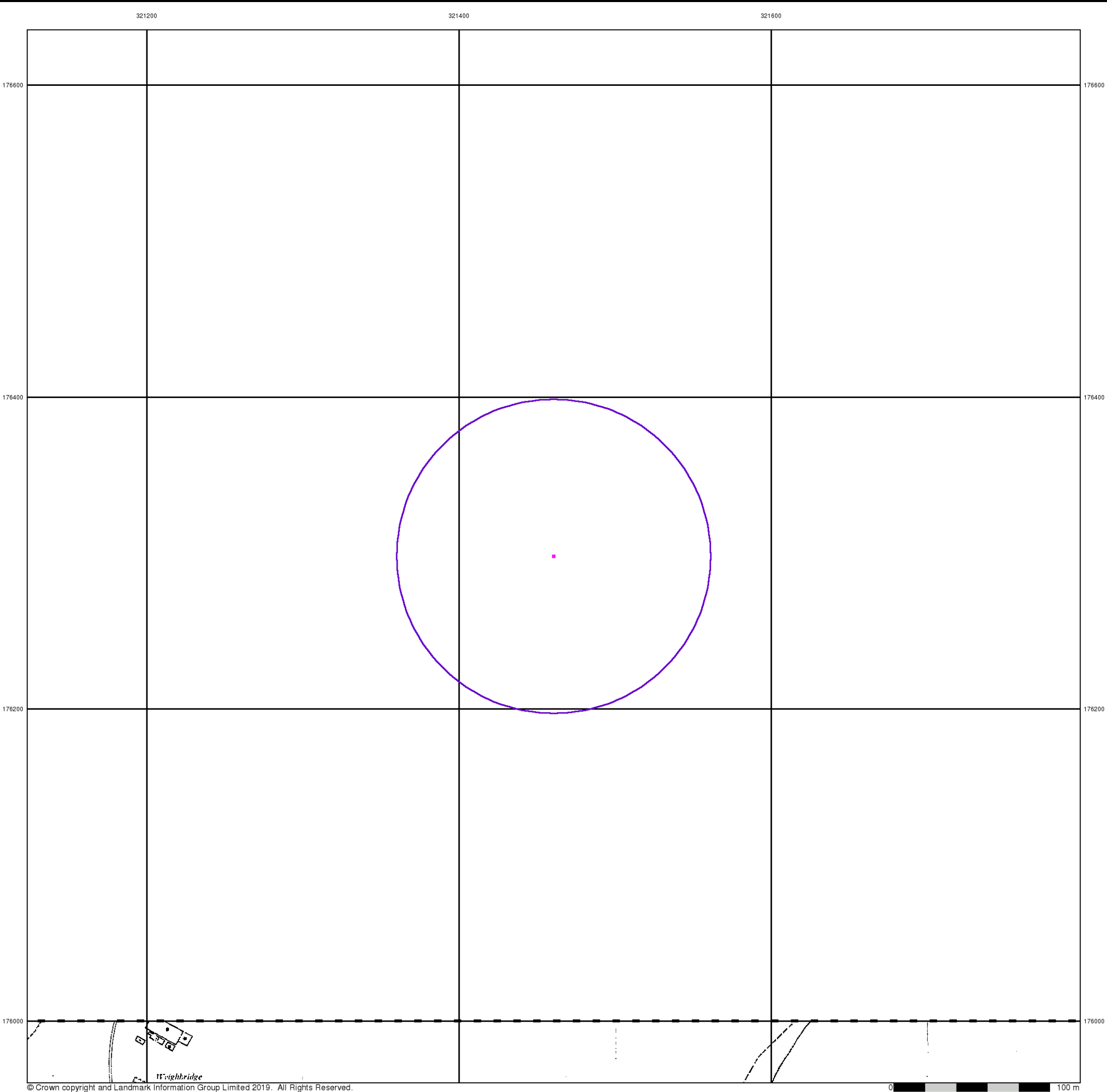
Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

Site at 321450, 176300

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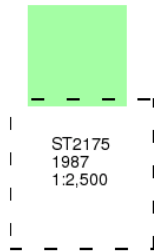
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Web: www.envirocheck.co.uk



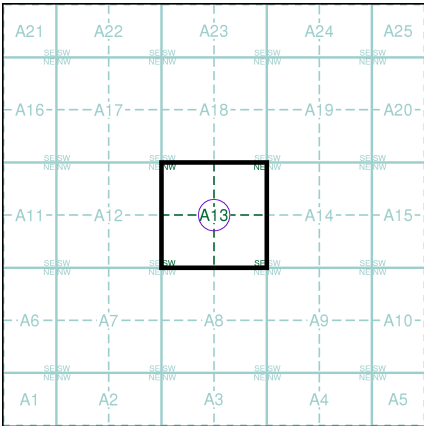
Additional SIMs
Published 1987
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

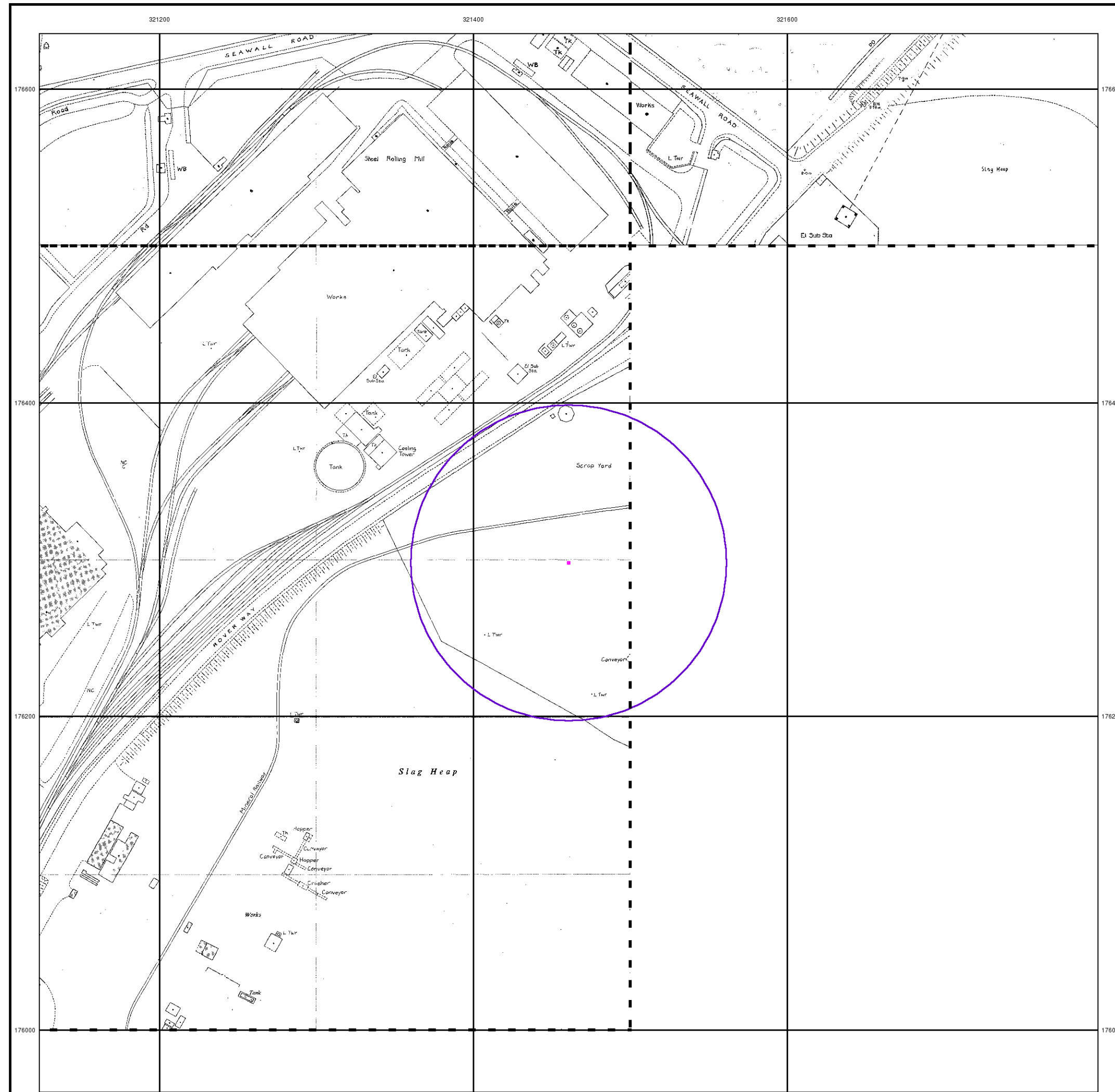


Historical Map - Segment A13



Order Details
Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details
Site at 321450, 176300



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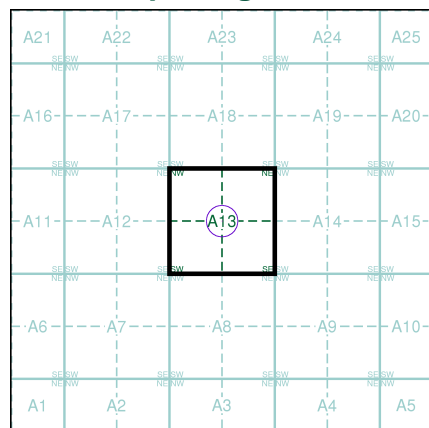
Additional SIMs
Published 1987 - 1988
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

ST2176NW 1987 1:1,250	ST2176NE 1988 1:1,250
ST2176SW 1988 1:1,250	

Historical Map - Segment A13



Order Details

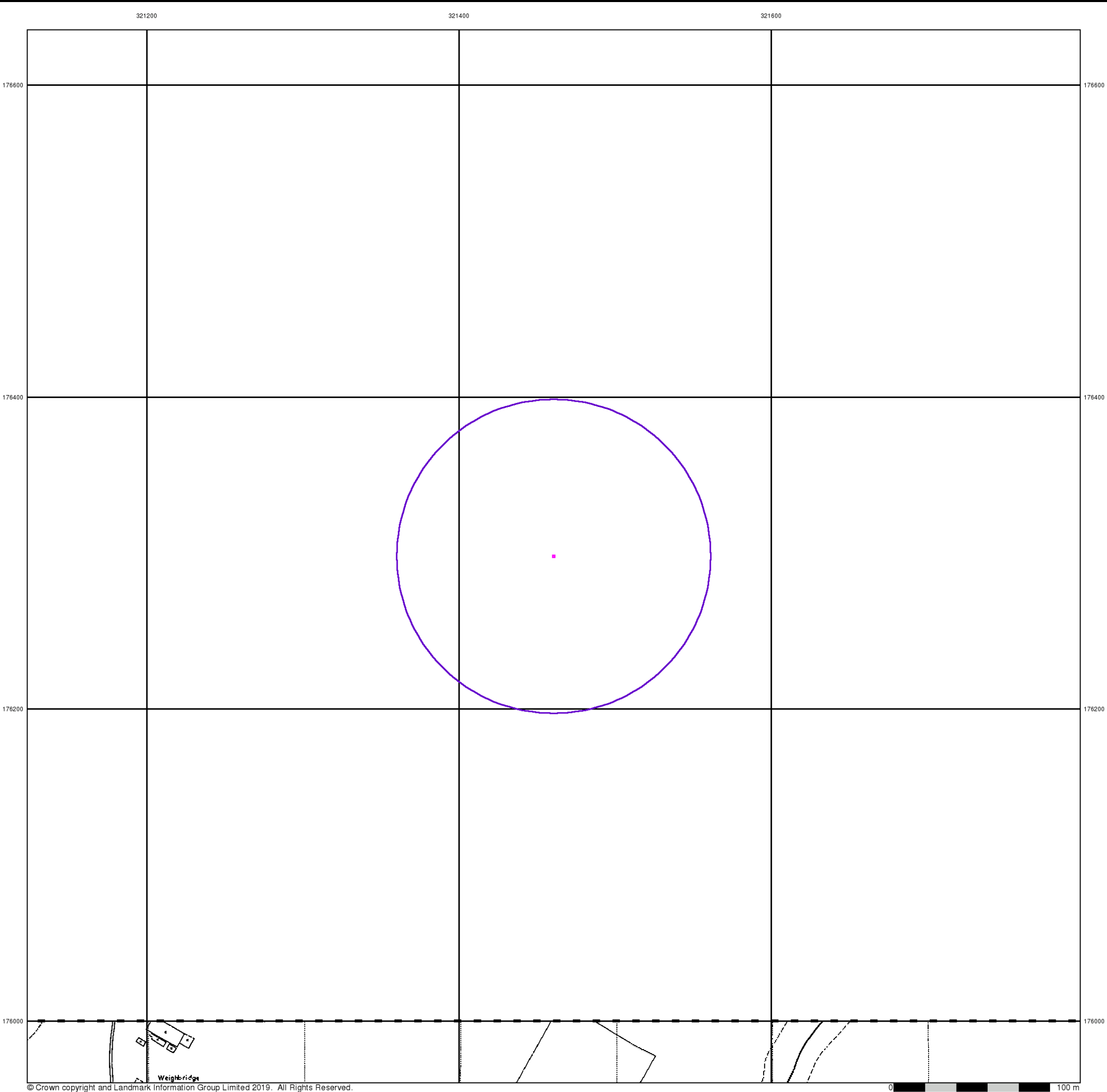
Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

Site at 321450, 176300



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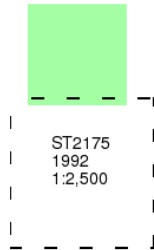
Large-Scale National Grid Data

Published 1992

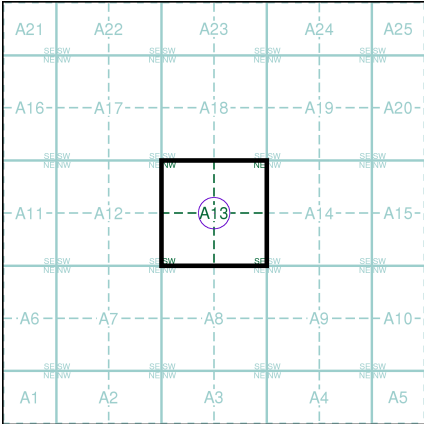
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
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Search Buffer (m): 100

Site Details

Site at 321450, 176300



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'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

ST2176NW 1992 1:1,250	ST2176NE 1992 1:1,250
ST2176SW 1992 1:1,250	ST2176SE 1992 1:1,250

The figure shows a 5x5 grid of cells. The columns are labeled A1, A2, A3, A4, and A5 from left to right. The rows are labeled A6, A7, A8, A9, and A10 from bottom to top. Each cell is labeled with its column and row identifier (e.g., A1, A2, A3, A4, A5 for the bottom row; A16, A17, A18, A19, A20 for the second row from the top; A21, A22, A23, A24, A25 for the top row). Cell A19 is highlighted with a thick black border and a purple circle.



Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site at 321450, 176300

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Large-Scale National Grid Data

Published 1993 - 1995

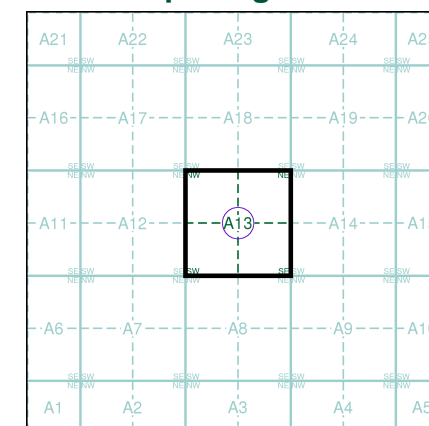
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

ST2176NW	1993	1:1,250
ST2176SW	1995	1:1,250
ST2176SE	1995	1:1,250

Historical Map - Segment A13



Order Details

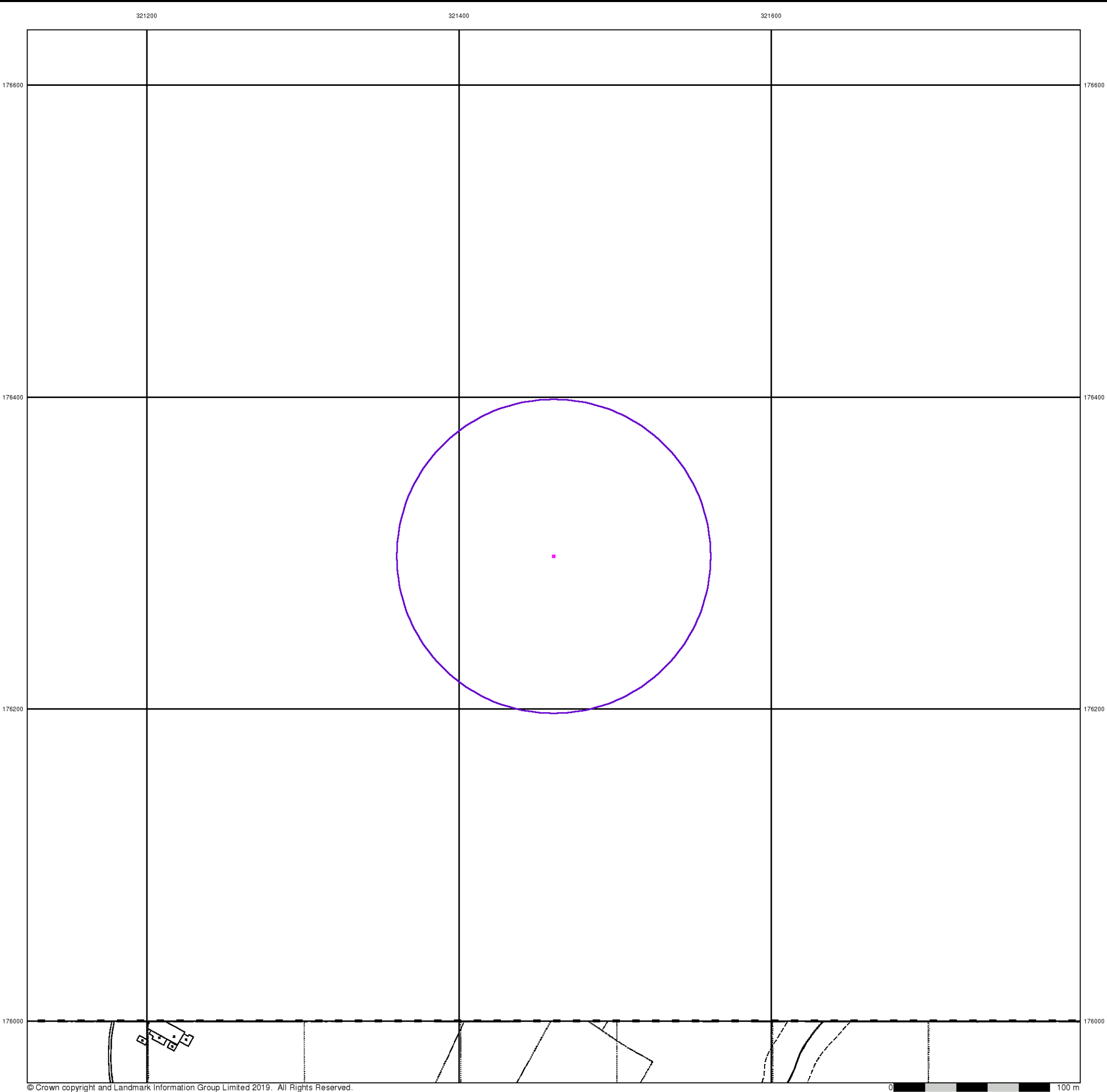
Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

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0 100 m



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Large-Scale National Grid Data

Published 1993

Source map scale - 1:2,500

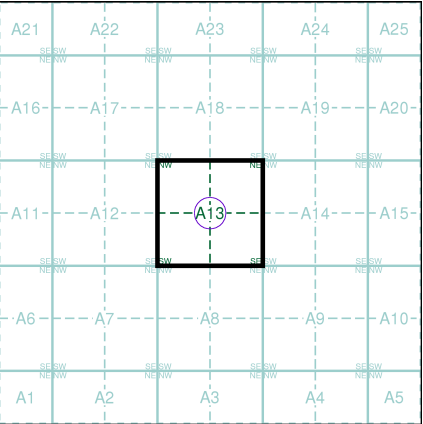
'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



ST2175
1993
1:2,500

Historical Map - Segment A13



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

Site at 321450, 176300

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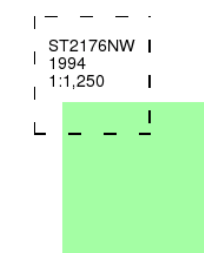
Large-Scale National Grid Data

Published 1994

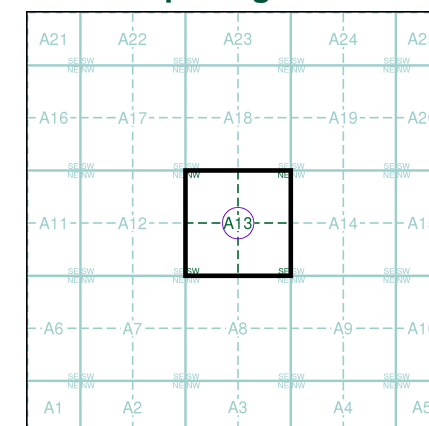
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

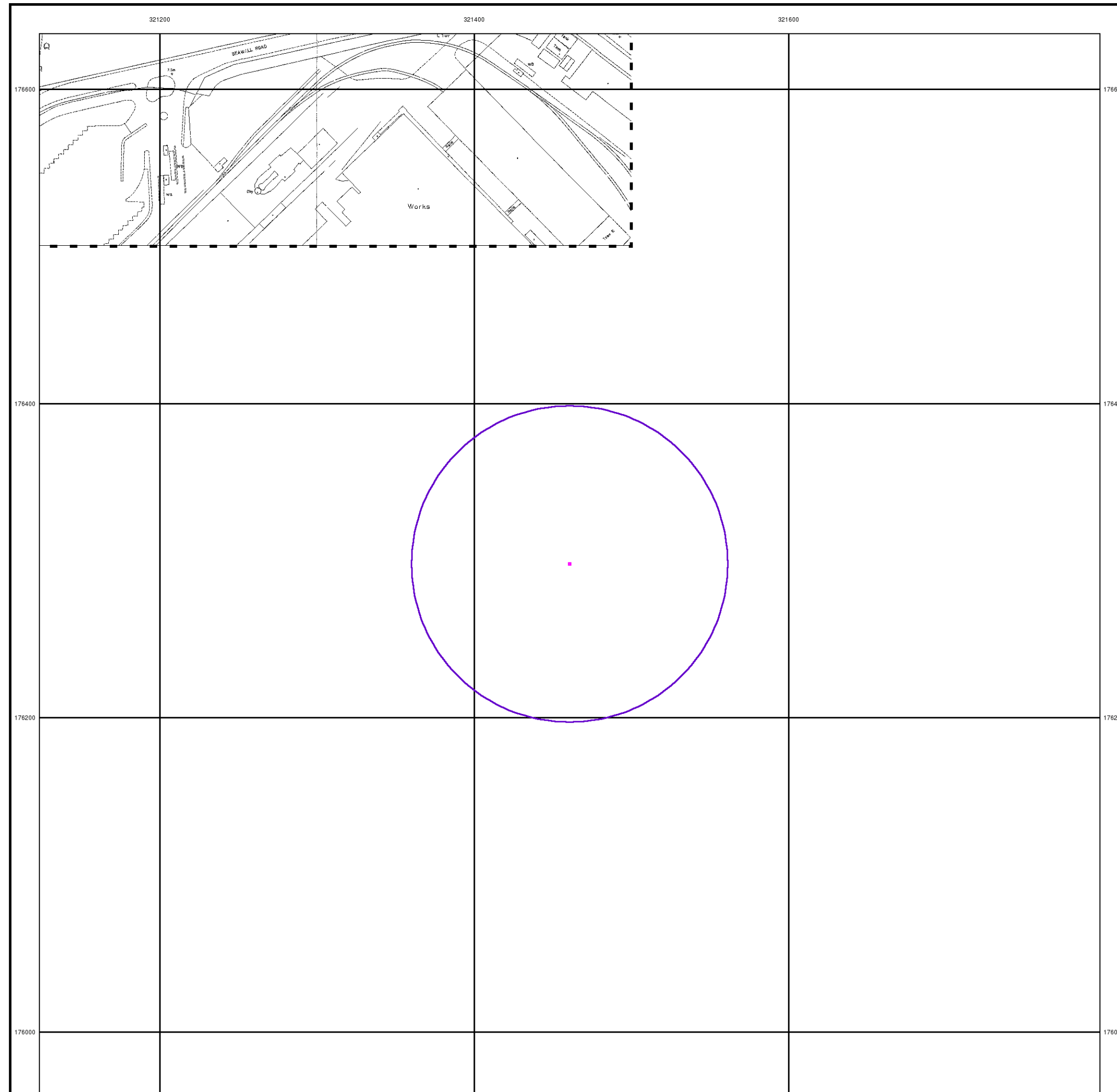
Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

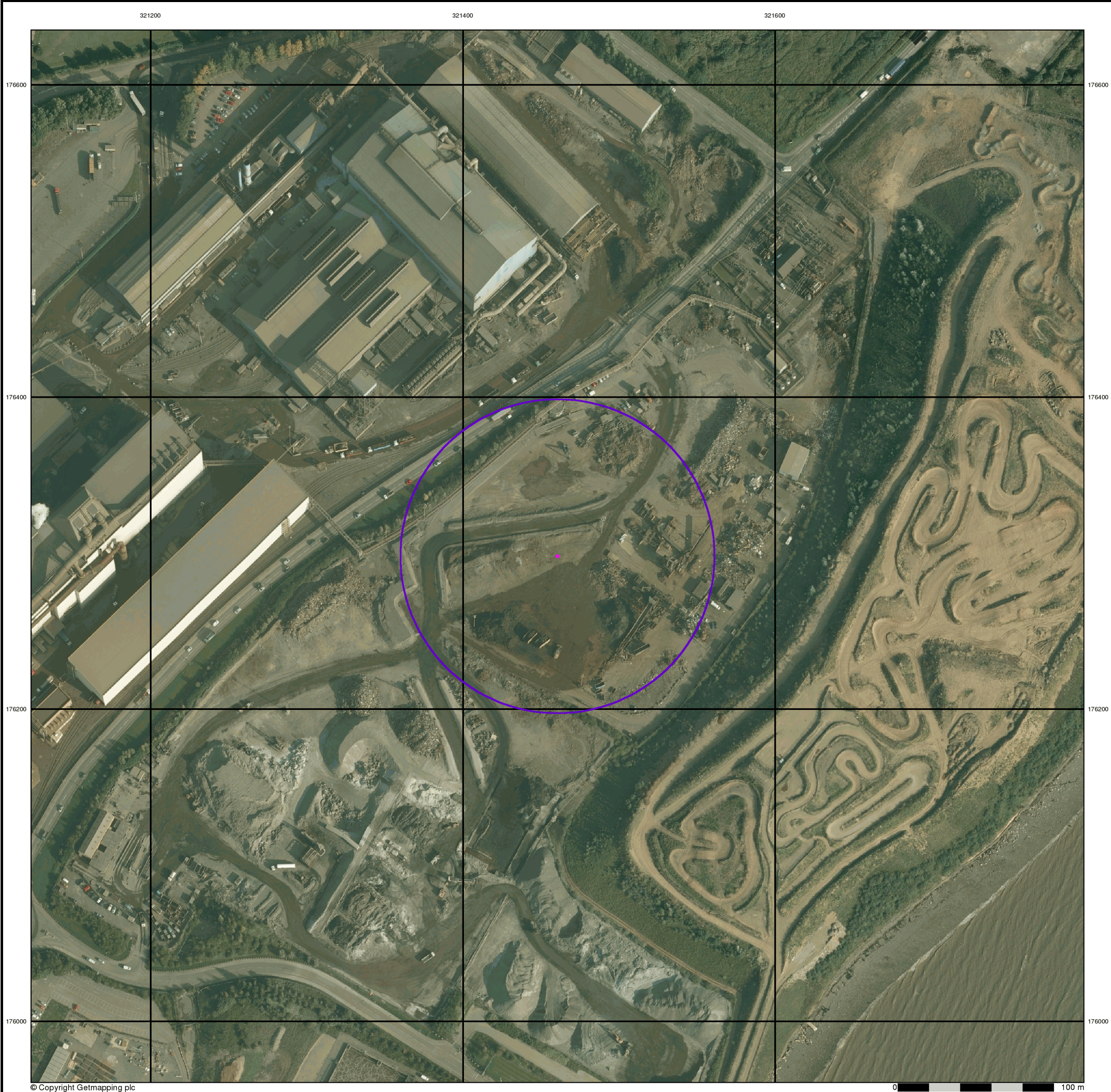
Site Details

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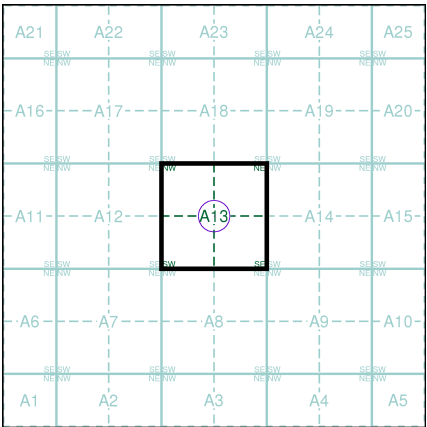


Historical Aerial Photography

Published 2009

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A13



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 100

Site Details

Site at 321450, 176300



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Historical Mapping Legends

Ordnance Survey County Series 1:10,560

	Gravel Pit		Sand Pit		Other Pits
	Quarry		Shingle		Orchard
	Osiers		Reeds		Marsh
	Mixed Wood		Deciduous		Brushwood
	Fir		Furze		Rough Pasture
	Arrow denotes flow of water		Trigonometrical Station		
	Site of Antiquities		Bench Mark		
	Pump, Guide Post, Signal Post		Well, Spring, Boundary Post		
	•285 Surface Level				
	Sketched Contour		Instrumental Contour		
	Main Roads		Minor Roads		
	Sunken Road		Raised Road		
	Road over Railway		Railway over River		
	Railway over Road		Level Crossing		
	Road over River or Canal		Road over Stream		
	Road over Stream				
	County Boundary (Geographical)				
	County & Civil Parish Boundary				
	Administrative County & Civil Parish Boundary				
	County Borough Boundary (England)				
	County Burgh Boundary (Scotland)				
	Rural District Boundary				
	Civil Parish Boundary				

Ordnance Survey Plan 1:10,000

	Chalk Pit, Clay Pit or Quarry		Gravel Pit
	Sand Pit		Disused Pit or Quarry
	Refuse or Slag Heap		Lake, Loch or Pond
	Dunes		Boulders
	Coniferous Trees		Non-Coniferous Trees
	Orchard		Scrub
	Bracken		Heath
	Marsh		Reeds
	Building		Glasshouse
	Sloping Masonry		Pylon
	Cutting		Embankment
	Road Under		Road Over
	Level Crossing		Foot Bridge
	Standard Gauge Multiple Track		Standard Gauge Single Track
	Siding, Tramway or Mineral Line		Narrow Gauge
	Geographical County		Administrative County, County Borough or County of City
	Municipal Borough, Urban or Rural District, Burgh or District Council		Borough, Burgh or County Constituency
	Civil Parish		
	BP, BS Boundary Post or Stone		Police Station
	Church		Post Office
	Club House		Public Convenience
	Fire Engine Station		Public House
	Foot Bridge		Signal Box
	Fountain		Spring
	Guide Post		Telephone Call Box
	Mile Post		Telephone Call Post
	Mile Stone		Well

1:10,000 Raster Mapping

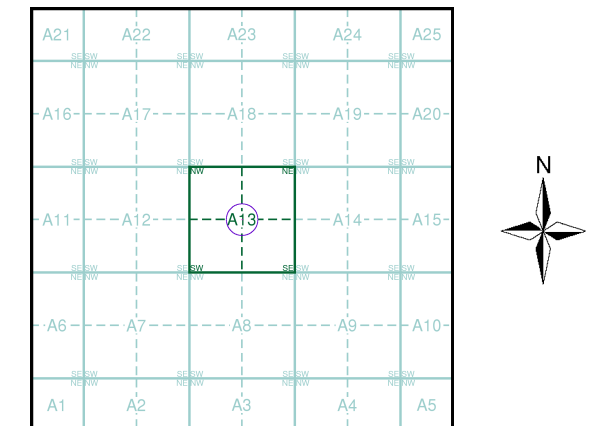
	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle		Mud
	Sand		Sand Pit
	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)		Civil, parish or community boundary
	District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
	Area of wooded vegetation		Non-coniferous trees
	Non-coniferous trees (scattered)		Coniferous trees
	Coniferous trees (scattered)		Positioned tree
	Orchard		Coppice or Osiers
	Rough Grassland		Heath
	Scrub		Marsh, Salt Marsh or Reeds
	Water feature		Flow arrows
	Mean high water (springs)		Mean low water (springs)
	Telephone line (where shown)		Electricity transmission line (with poles)
	Bench mark (where shown)		Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)		Pylon, flare stack or lighting tower
	Site of (antiquity)		Glasshouse
	General Building		Important Building



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:10,560	1885 - 1886	3
Monmouthshire	1:10,560	1886 - 1887	4
Monmouthshire	1:10,560	1887	5
Glamorganshire	1:10,560	1901	6
Glamorganshire	1:10,560	1922	7
Glamorganshire	1:10,560	1938 - 1947	8
Glamorganshire	1:10,560	1947 - 1954	9
Historical Aerial Photography	1:10,560	1947	10
Historical Aerial Photography	1:10,560	1947	11
Ordnance Survey Plan	1:10,000	1964 - 1965	12
Ordnance Survey Plan	1:10,000	1970 - 1975	13
Cardiff	1:10,000	1982	14
Ordnance Survey Plan	1:10,000	1989	15
Ordnance Survey Plan	1:10,000	1993	16
10K Raster Mapping	1:10,000	1999	17
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2019	19

Historical Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300



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Russian Military Mapping Legends

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

a. Not drawn to scale b. Drawn to scale

Government and Administrative Buildings

Military and Industrial Buildings

Military and Communication Areas

Subway Entrance

Fireproof Building

Prominent Fireproof Building

Non-fireproof Building

Non-fireproof Building (non-dwelling)

Factory, mill, and flour mill, with chimneys

Factory, mill, and flour mill, without chimneys

Power Station, drawn to scale

Hydroelectric Power Station

Radio Station, drawn to scale

Telephone Station, drawn to scale

Abandoned Open-pit Mine or Quarry

Open-pit Salt Mine

Pit

Oil Deposit or Well

Oil Seepage

Tailings Pile

Fuel Storage Tanks

Natural Gas Tank

Bench Mark

Drill Hole

Burial Mound

Triangulation Point on Burial Mound

Single-track Railroad

Double-track Railroad and Station Building

Coniferous Forest

Deciduous Forest

Mixed Forest

Lawns

Citrus Orchard

Wet Ground

Scattered Vegetation

243.8 Values for prominent elevations
186.0 Numbers for spot elevations, depth soundings, contour lines, etc.
0.2 Velocity of the current, width of river bed, depth of river
180/12 Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

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

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

1:25,000 mapping

a. Not drawn to scale b. Drawn to scale

Government and Administrative Buildings

Military and Industrial Buildings

Military and Communication Areas

Subway Entrance

Partly Demolished Buildings

Demolished Buildings

Built-Up Area with Fireproof Buildings Predominant

Built-Up Area with Non-Fireproof Buildings Predominant

Individual Fireproof Building

Prominent Industrial Building

Individual Dwelling, Fireproof

Ruins of an Individual Dwelling

Factory or Mill Chimney

Factory or Mill with Chimney

Factory or Mill without Chimney

Mine or Open Pit Mine

Operating Shaft or Mine

Non-Operating Shaft or Mine

Salt Mine

Tailings Pile

Pit

Stone Quarry

Gas Pump or Service Station

Fuel Storage or Natural Gas Tank

Oil or Natural Gas Derrick

Small Hydroelectric Power Station

Power Station

Transformer Station

Cemetery

Burial Mound (height in metres)

Triangulation Point on Burial Mound

Triangulation Point

Bench Mark

Bench Mark (monumented)

Telegraph Office

Telephone Station

Radio Station

Radio Tower

Airfield or Seaplane Base

Landing Strip

Cut, Fill, Km Post, Plantings

Telegraph/Telephone Lines

Main Highway

Highway under Construction

Improved Dirt Road (former truck road)

Small Bridge, Pipe (Culvert), Tunnel

Double-track Railroad with First Class Station

Railroad Under Construction

Shore Embankment

River or Ditch with Embankment

Water Gauge

Well

Water Reservoir or Rain Water Pit

Spring

Isobath with value

Heavy (Index) Contour Line

Contour Line and Value

Half Contour Line

Spot Elevation Value

Coniferous

Deciduous

Mixed

Scrub

Key to Numbers on Mapping

ST27NW_Cardiff

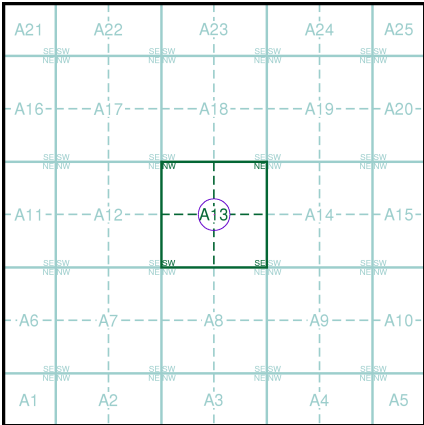
No.	Description
14	Factory (Cars)
45	Factories (Metal Works)
103	Depot (Railway)



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:10,560	1885 - 1886	3
Monmouthshire	1:10,560	1886 - 1887	4
Monmouthshire	1:10,560	1887	5
Glamorganshire	1:10,560	1901	6
Glamorganshire	1:10,560	1922	7
Glamorganshire	1:10,560	1938 - 1947	8
Glamorganshire	1:10,560	1947 - 1954	9
Historical Aerial Photography	1:10,560	1947	10
Historical Aerial Photography	1:10,560	1947	11
Ordnance Survey Plan	1:10,000	1964 - 1965	12
Ordnance Survey Plan	1:10,000	1970 - 1975	13
Cardiff	1:10,000	1982	14
Ordnance Survey Plan	1:10,000	1989	15
Ordnance Survey Plan	1:10,000	1993	16
10K Raster Mapping	1:10,000	1999	17
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2019	19

Russian Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300



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Glamorganshire

Published 1885 - 1886

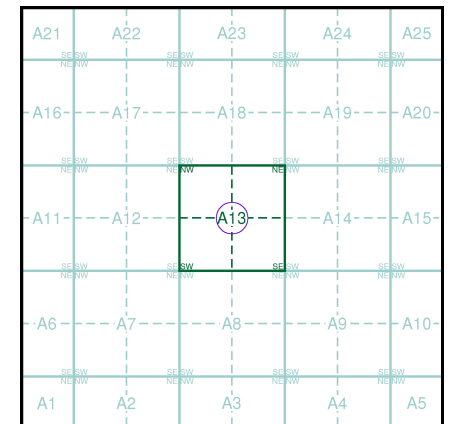
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

04300	1886	1:10,560
04700	1885	1:10,560

Historical Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
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Site Details

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Monmouthshire

Published 1886 - 1887

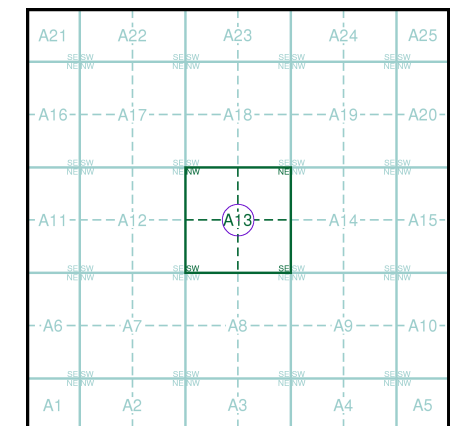
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

03800
1886
1:10,560
038A00
1887
1:10,560

Historical Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300

Landmark
INFORMATION GROUP

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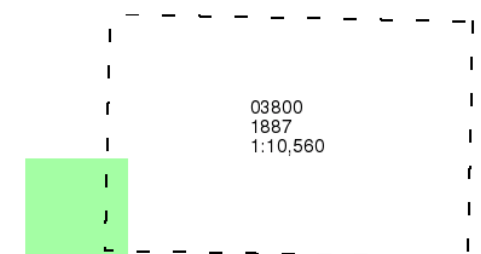
Monmouthshire

Published 1887

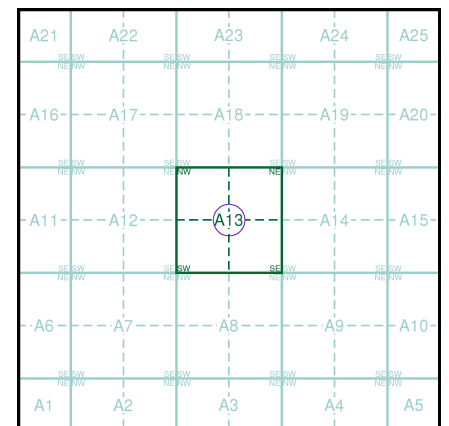
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
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Map Name(s) and Date(s)

043SE 1901 1:10,560	043ASW 1901 1:10,560
047NE 1901 1:10,560	

Historical Map - Slice A

A21	A22	A23	A24	A25
A16	A17	A18	A19	A20
A11	A12	A13	A14	A15
A6	A7	A8	A9	A10
A1	A2	A3	A4	A5

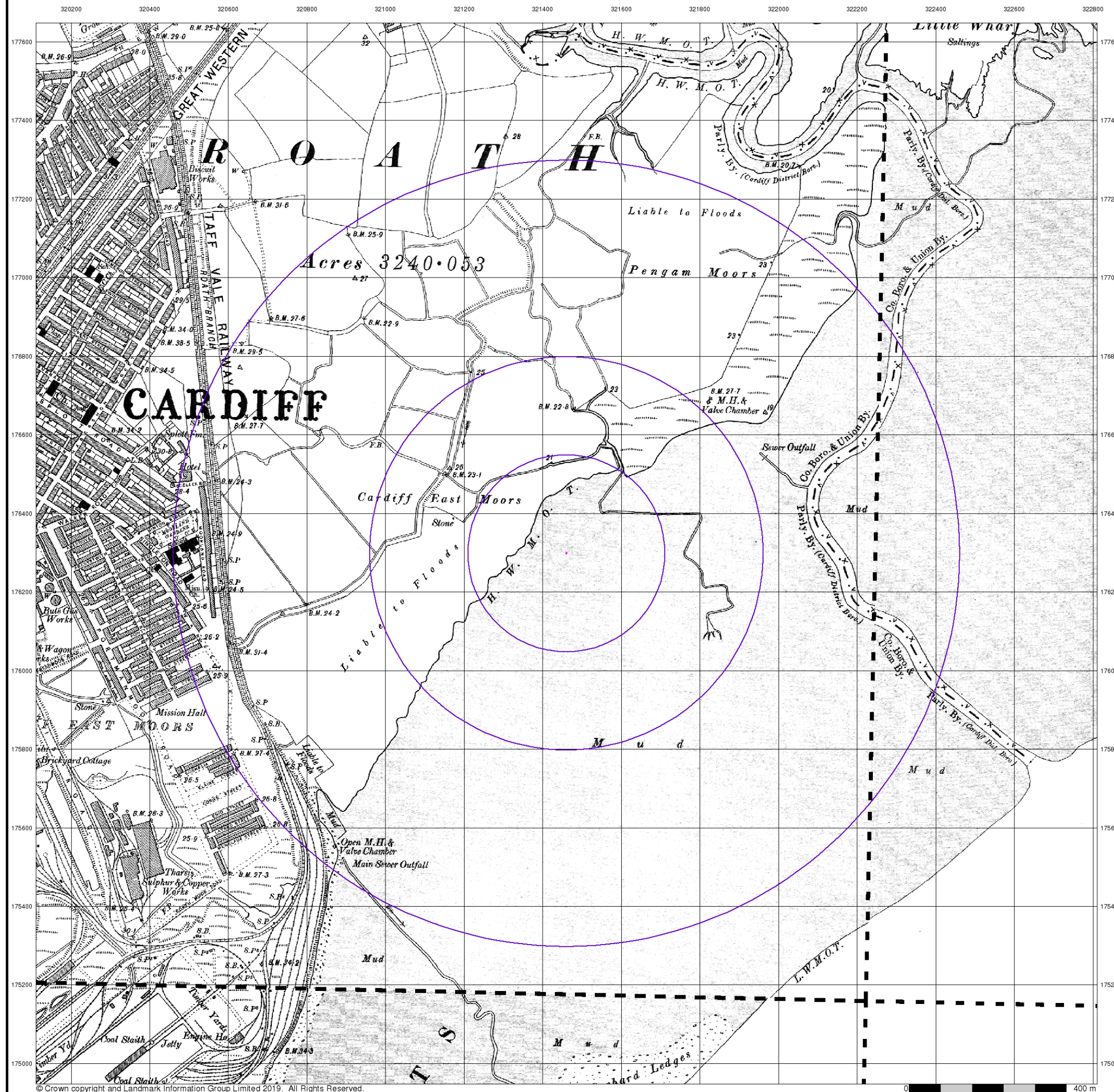


Order Details

Order Number: 197133902_1_1
 Customer Ref: 15264-DE
 National Grid Reference: 321460, 176300
 Slice: A
 Site Area (Ha): 0.01
 Search Buffer (m): 1000

Site Details

Site at 321450, 176300





Glamorganshire

Published 1922

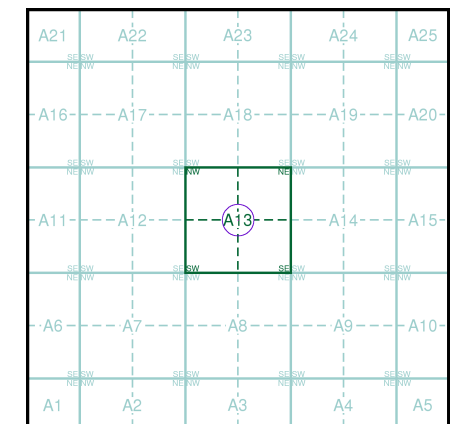
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

043SE	1922	1:10,560
047NE	1922	1:10,560

Historical Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300

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Glamorganshire

Published 1938 - 1947

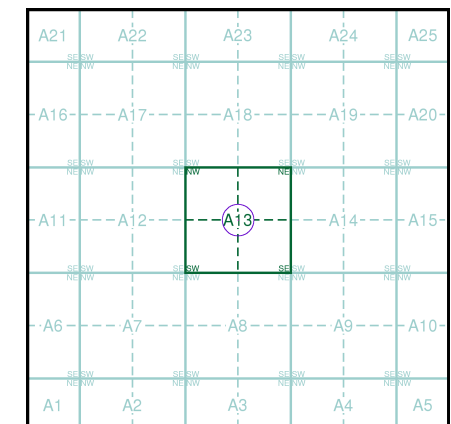
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

043SE	1938	1:10,560	043A00	1947	1:10,560
-------	------	----------	--------	------	----------

Historical Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300



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Glamorganshire

Published 1947 - 1954

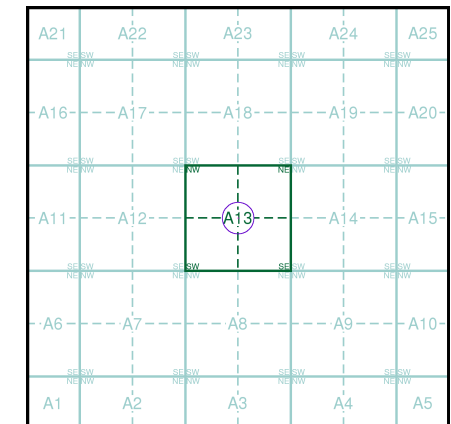
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

043SE	1951	1:10,560
047NE	1947	1:10,560

Historical Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300

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INFORMATION GROUP

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Historical Aerial Photography

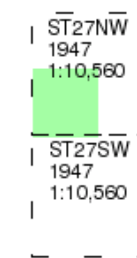
Published 1947

Source map scale - 1:10,560

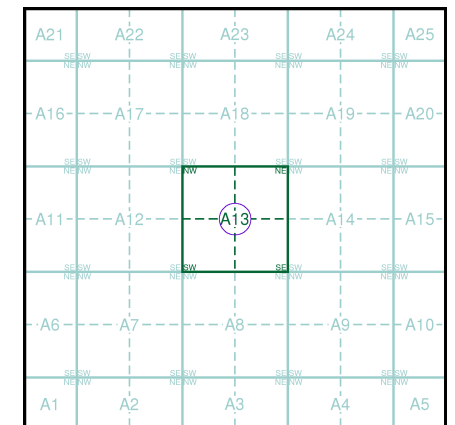
The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

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Map Name(s) and Date(s)



Historical Aerial Photography - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300



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Historical Aerial Photography

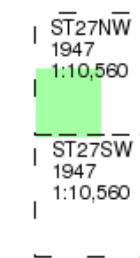
Published 1947

Source map scale - 1:10,560

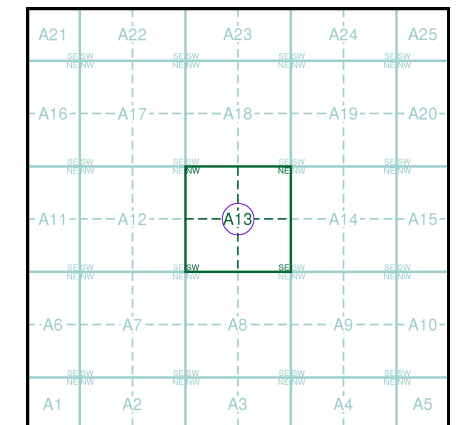
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Map Name(s) and Date(s)



Historical Aerial Photography - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

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Ordnance Survey Plan

Published 1964 - 1965

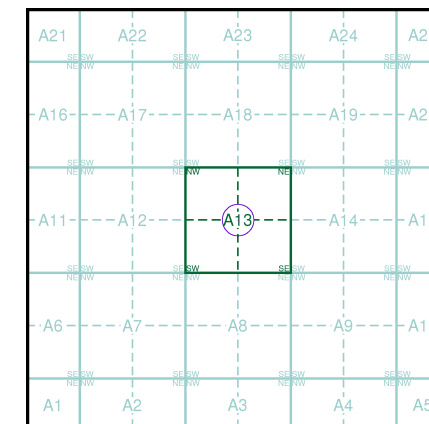
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

ST27NW	1965
1:10,560	
ST27SW	1964
1:10,560	

Historical Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300



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Ordnance Survey Plan

Published 1970 - 1975

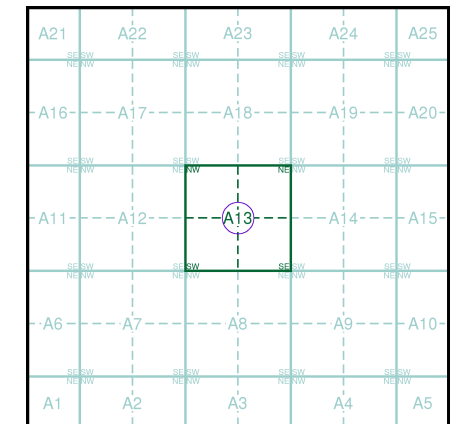
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

ST27NW	1975
1:10,000	
ST27SW	1970
1:10,000	

Historical Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300

Landmark
INFORMATION GROUP

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Cardiff

Published 1982

Source map scale - 1:10,000

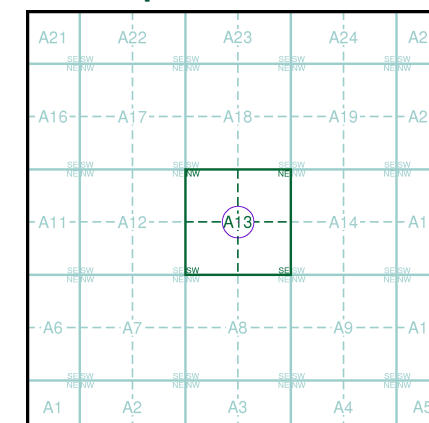
These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed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

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

Map Name(s) and Date(s)

ST27NW
1982
1:10,000
ST27SW
1982
1:10,000

Russian Map - Slice A



Order Details

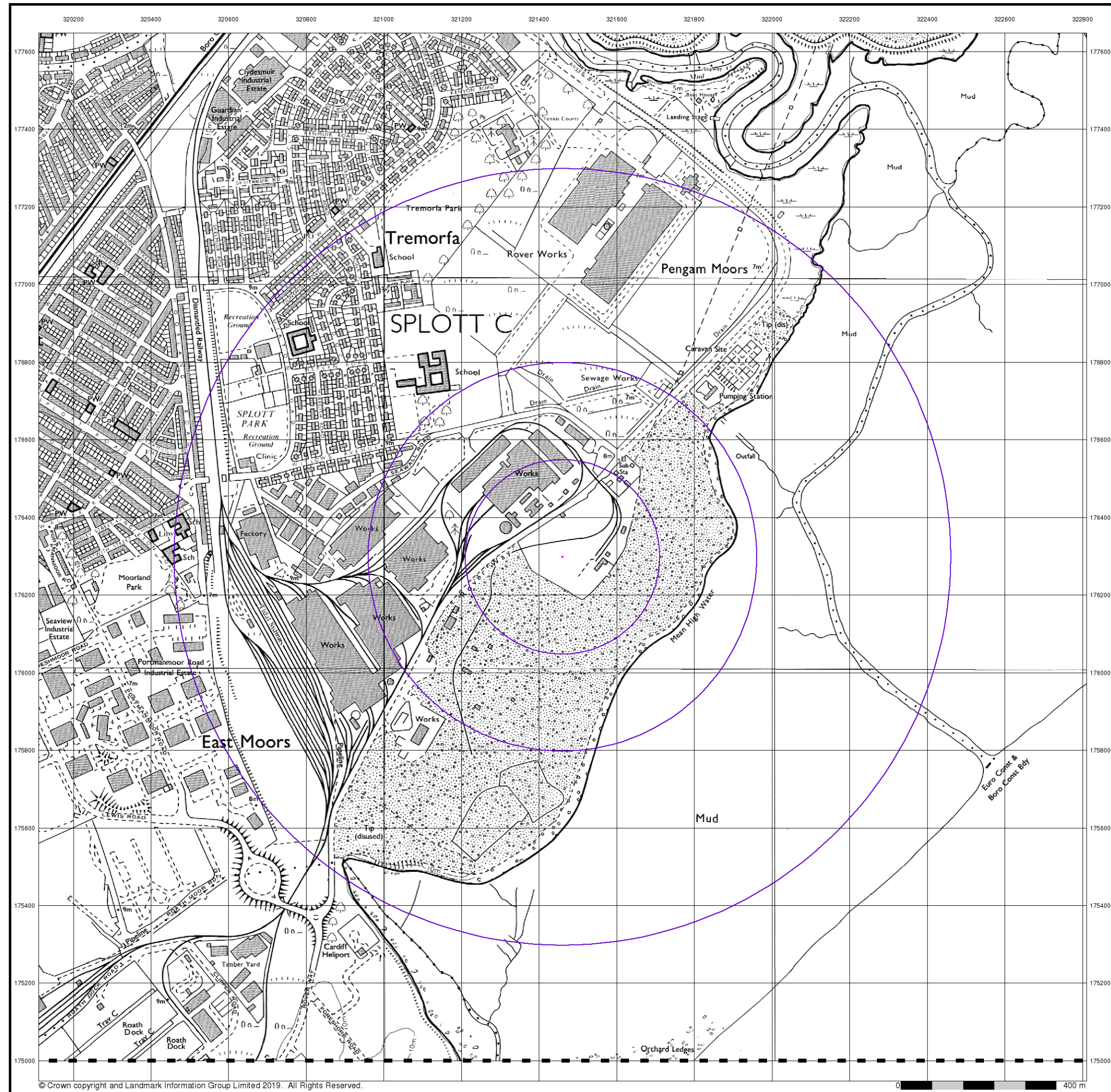
Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300

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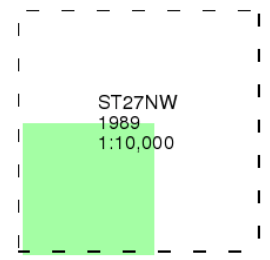
Ordnance Survey Plan

Published 1989

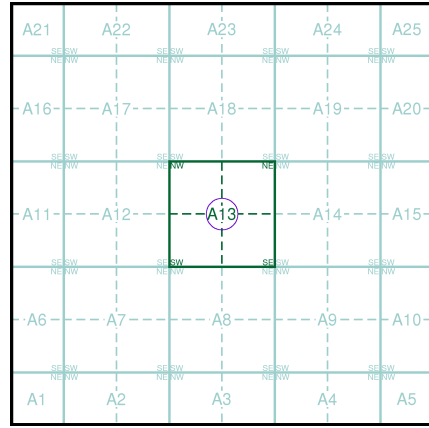
Source map scale - 1:10,000

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Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300



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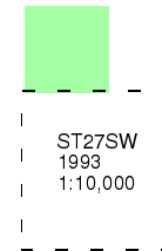
Ordnance Survey Plan

Published 1993

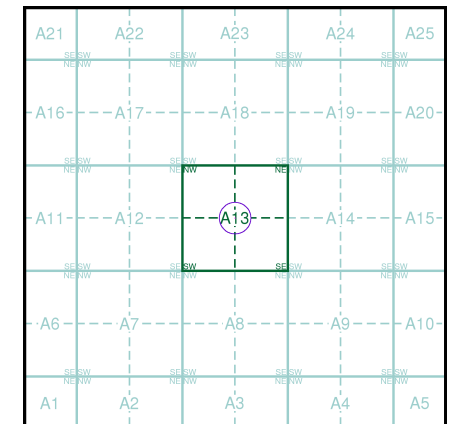
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300



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10k Raster Mapping

Published 1999

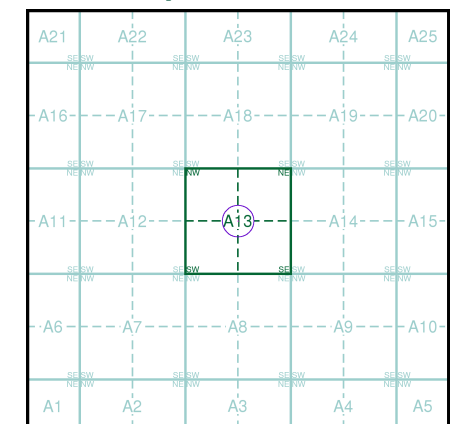
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

ST27NW	1999
1:10,000	
ST27SW	1999
1:10,000	

Historical Map - Slice A



Order Details

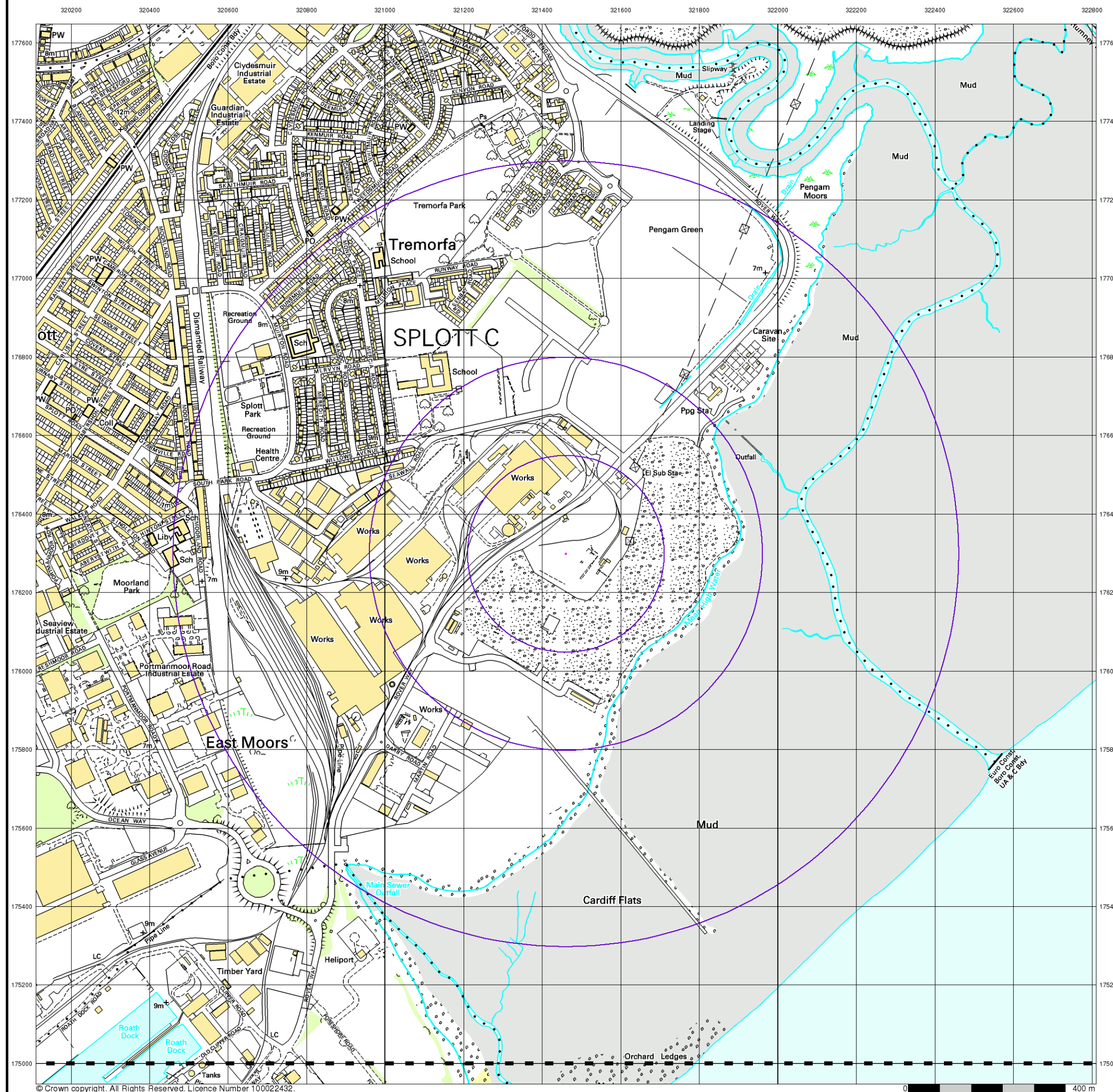
Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300

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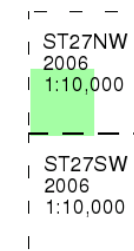
10k Raster Mapping

Published 2006

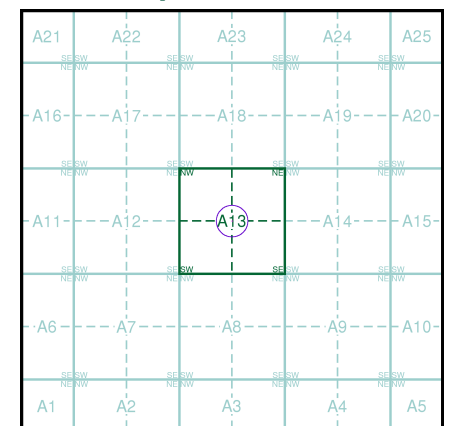
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300



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VectorMap Local

Published 2019

Source map scale - 1:10,000

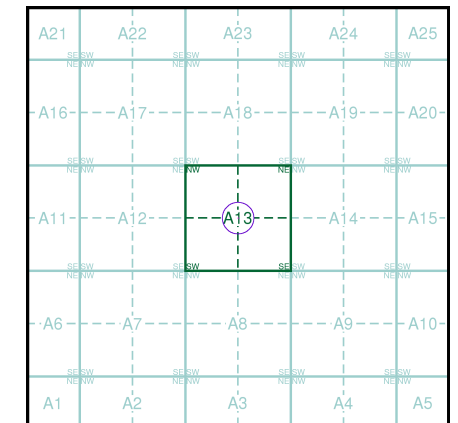
VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities), 1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

ST27NW
2019
Variable

ST27SW
2019
Variable

Historical Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300



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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Types at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral
- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

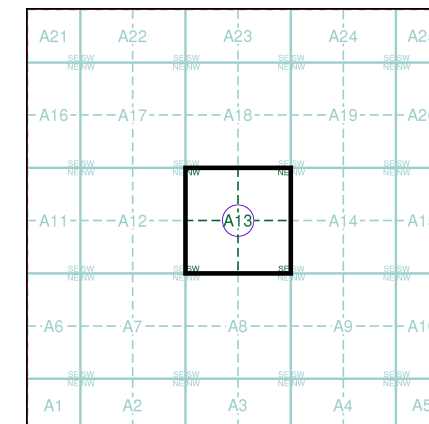
Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement
- BGS Recorded Mineral Site

Geological

- BGS Recorded Mineral Site

Site Sensitivity Map - Segment A13

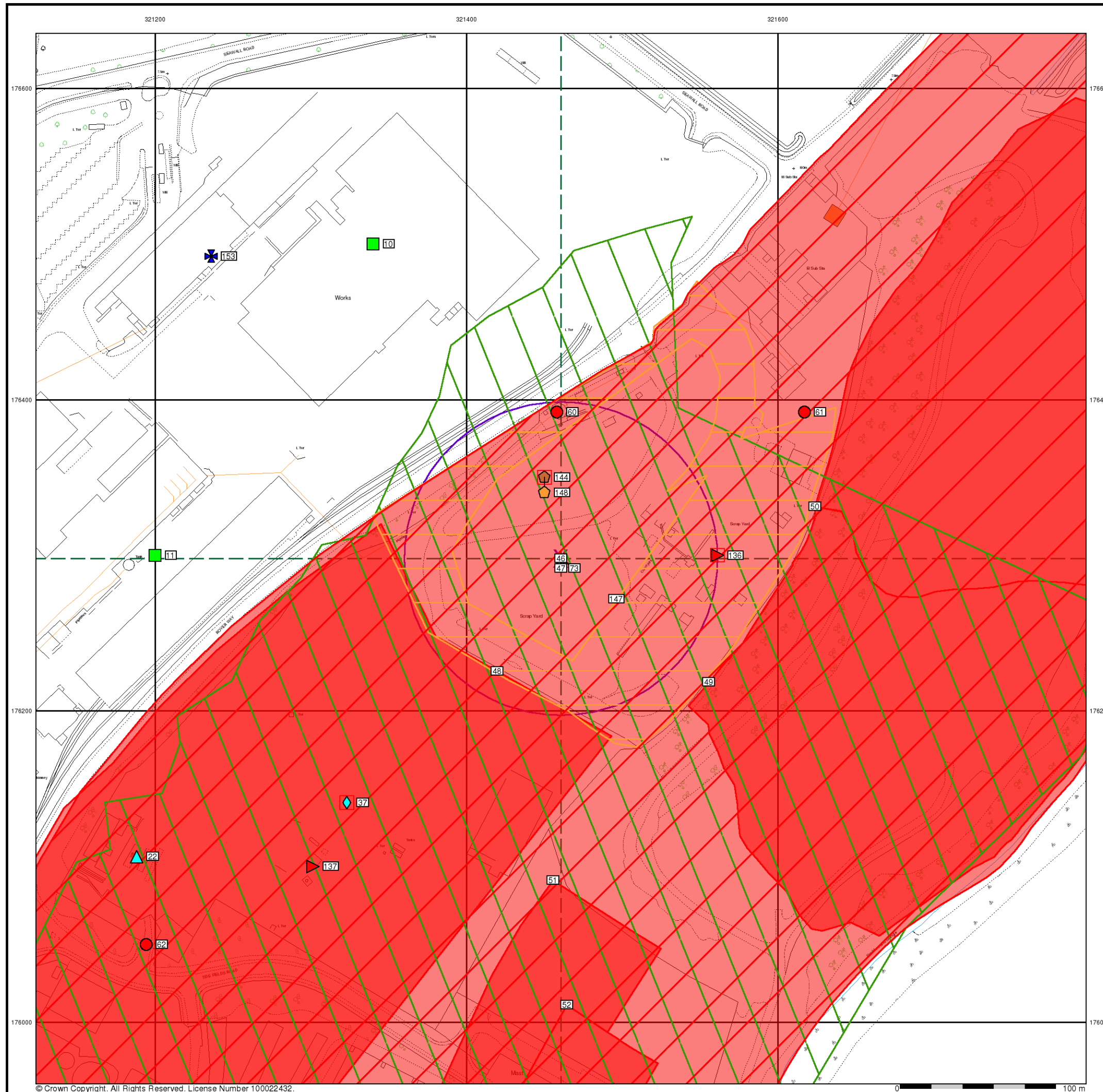


Order Details

Order Number: 197133902_1_1
 Customer Ref: 15264-DE
 National Grid Reference: 321460, 176300
 Slice: A
 Site Area (Ha): 0.01
 Plot Buffer (m): 100

Site Details

Site at 321450, 176300



General

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

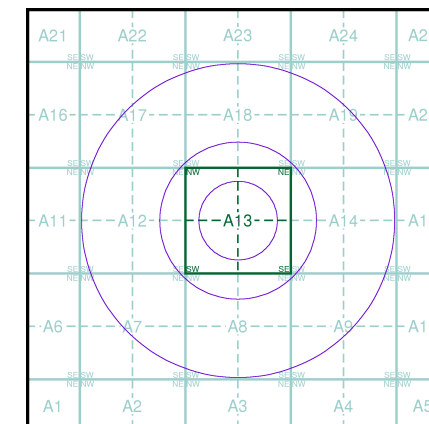
Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral
- Hazardous Substances
- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement
- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Slice A



Order Details

Order Number: 197133902_1_1
 Customer Ref: 15264-DE
 National Grid Reference: 321460, 176300
 Slice: A
 Site Area (Ha): 0.01
 Search Buffer (m): 1000

Site Details

Site at 321450, 176300



Industrial Land Use Map

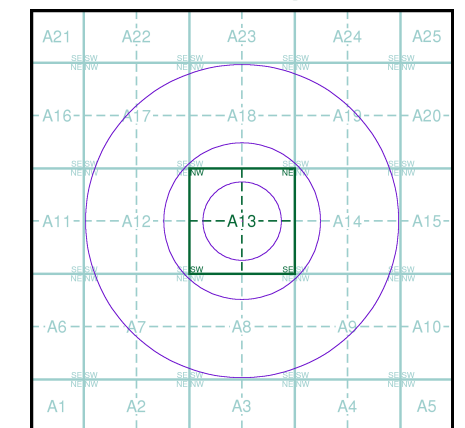
General

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

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300

Landmark
INFORMATION GROUP

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



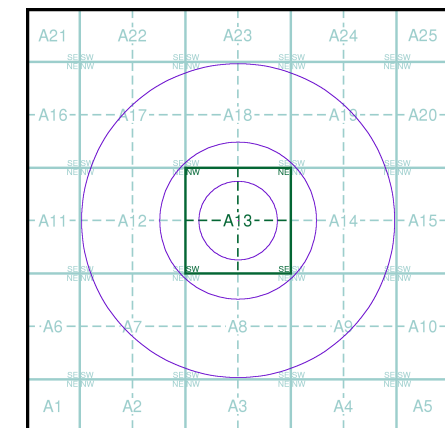
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Agency and Hydrological (Flood)

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Flood Map - Slice A



Order Details

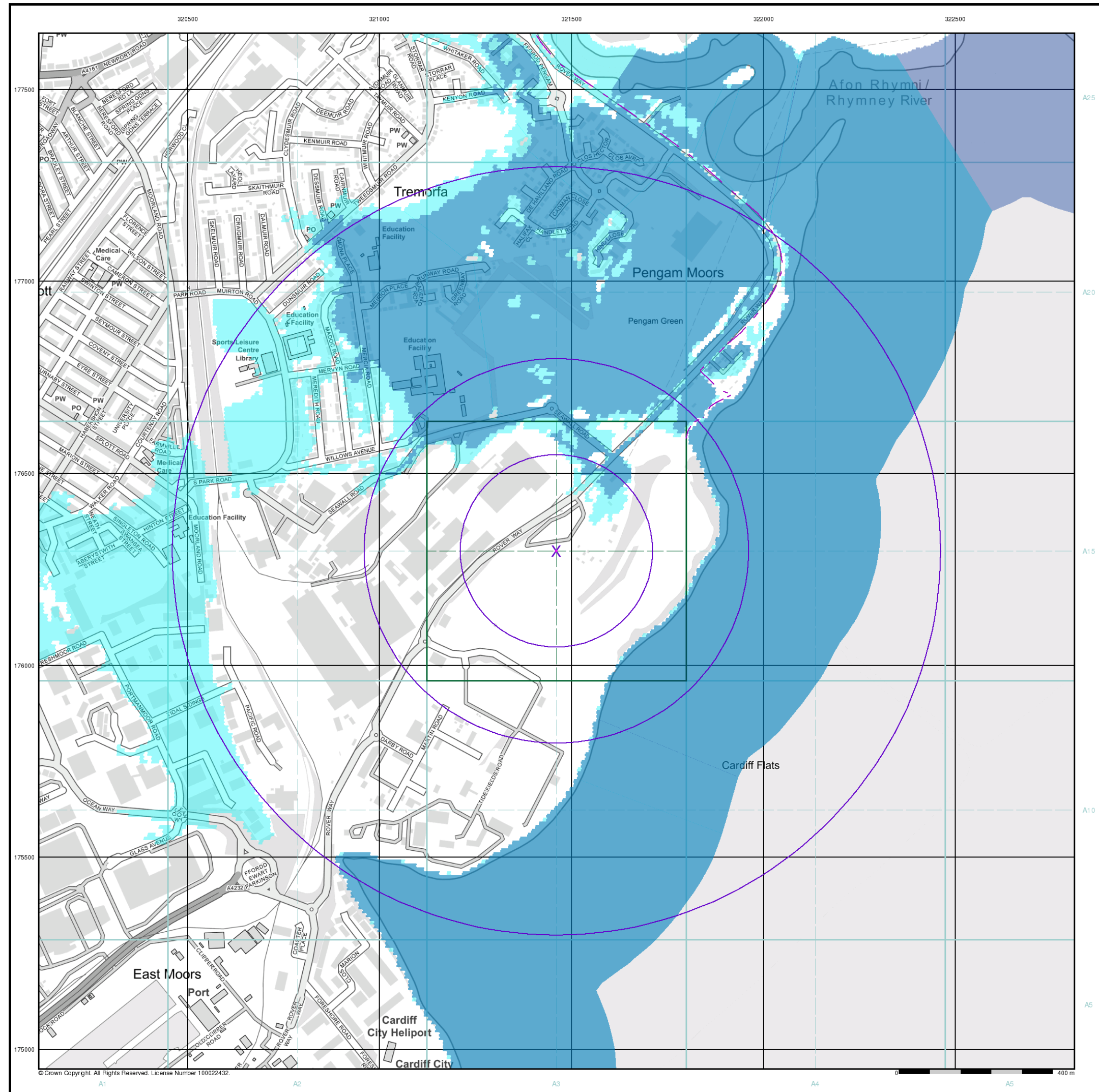
Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details






Site at 321450, 176300








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



General

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

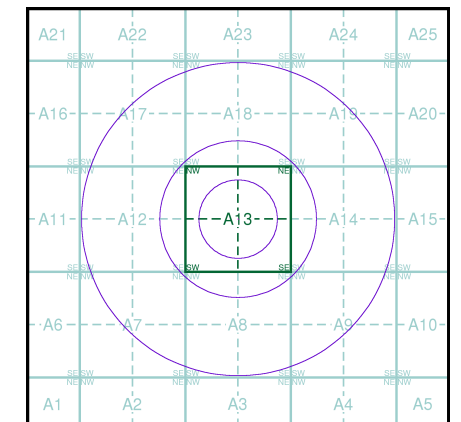
Agency and Hydrological (Boreholes)

-  BGS Borehole Depth 0 - 10m
-  BGS Borehole Depth 10 - 30m
-  BGS Borehole Depth 30m +
-  Confidential
-  Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A

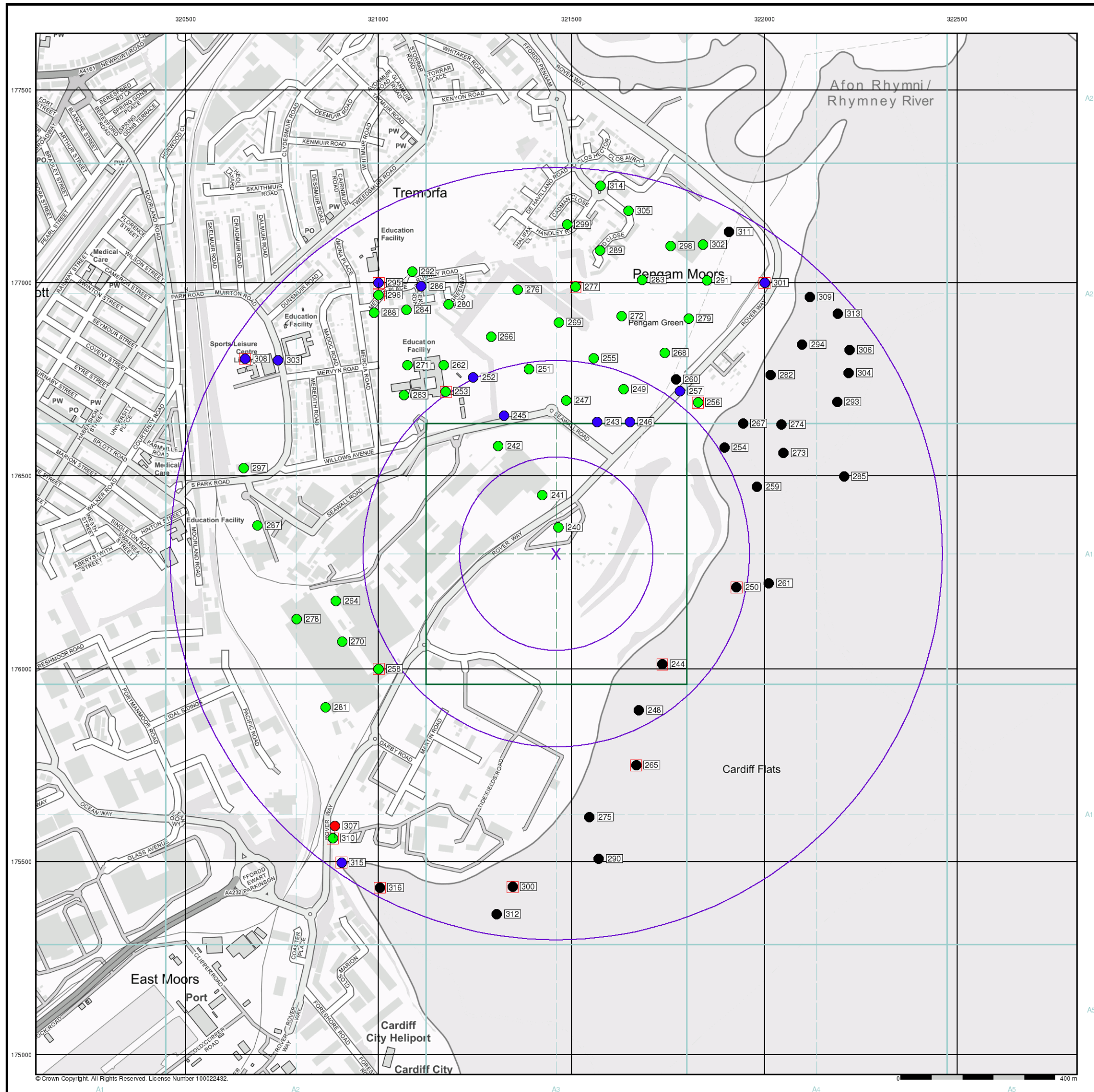


Order Details

Order Number: 197133902_1_1
 Customer Ref: 15264-DE
 National Grid Reference: 321460, 176300
 Slice: A
 Site Area (Ha): 0.01
 Search Buffer (m): 1000

Site Details

Site at 321450, 176300





General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

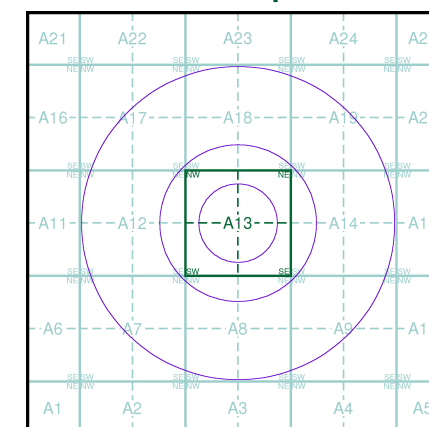
OS Water Network Data

- | | |
|--------------|-------------------------|
| Canal | Drain |
| Reservoir | Other |
| Foreshore | Lake |
| Marsh | Transfer |
| Tidal River | Lock Or Flight Of Locks |
| Inland River | Sea |

Contours (height in meters)

- Standard Contour 105 100 95
- Master Contour MLW MHW
- Spot Height 167.3

OS Water Network Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300

Landmark
INFORMATION GROUP

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



General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

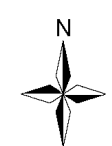
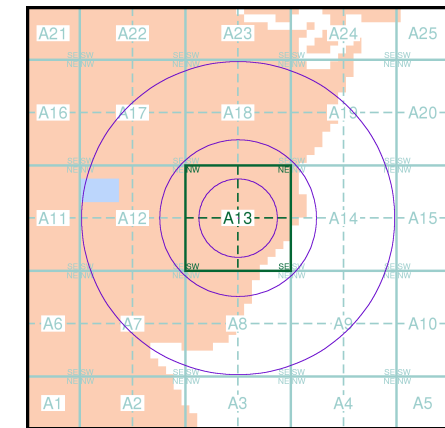
Risk of Flooding from Surface Water

- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

- See the suitability map below
- National to county
 - County to town
 - Town to street
 - Street to parcels of land
 - Property

EANRW Suitability Map - Slice A



Order Details

Order Number: 197133902_1_1
Customer Ref: 15264-DE
National Grid Reference: 321460, 176300
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

Site at 321450, 176300



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ANNEX B
Risk Assessment Definitions

The contaminated land regime is set out in Part IIA of the Environmental Protection Act (EPA) 1990 and was introduced on the 1st April 2000 in England and 1st July 2001 in Wales. A similar regime was introduced in Scotland on 14th July 2000.

Part IIA was introduced to achieve two aims:

- (1) The identification of contaminated land
- (2) The remediation of contaminated land that poses an unacceptable risk to human health and/or the environment

Under Part IIA the statutory definition of 'contaminated land' is:

"any land which appears to the local authority in whose area it is situated, to be in such a condition, by reason of substances in, on, or under the land, that:

- (a) Significant harm is being caused or there is a significant possibility of such harm being caused; or
- (b) Pollution of controlled waters is being, or is likely to be, caused."

For land to be classified as 'Contaminated Land' there must be a '**pollutant linkage**'. A pollutant linkage requires three essential elements:

- (1) A **CONTAMINANT** (hazard) - a substance that is in, on or under the land and has the potential to cause harm or to cause pollution of controlled waters
- (2) A **RECEPTOR** (target) - something which could be adversely affected by a contaminant
- (3) A **PATHWAY** - a route or means which either allows the contaminant to cause significant harm to that receptor, or that there is a significant possibility of such harm being caused to the receptor, or that pollution of controlled waters is being or likely to be caused.

The term 'Risk' is widely used in different contexts and situations, but a prescriptive definition is given by the Guidelines for Environmental Risk Assessment and Management (DEFRA *et al*, 2000):

'Risk is a combination of the probability, or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence'.

A 'Hazard' is defined as '*a property or situation that in particular circumstances could lead to harm*'.

The classification of consequences and probability and determining the risk category are defined in the following sections.

Classification of Consequence

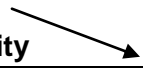
Table A Classification of Consequence	
Classification	Definition
Severe	<ul style="list-style-type: none"> • Short term (acute) risk to human health likely to result in significant harm • Short term risk to controlled waters • Catastrophic damage to buildings/structures • Short term risk to an ecosystem or organism within the particular ecosystem
Medium	<ul style="list-style-type: none"> • Chronic damage to human health (long term risk) • Pollution of a sensitive water resource • A significant change in an ecosystem or organism within the ecosystem
Mild	<ul style="list-style-type: none"> • Pollution of non-sensitive water resources • Significant damage to buildings/structures
Negligible	<ul style="list-style-type: none"> • Harm (not necessarily significant) which may result in financial loss • Non permanent health effects to humans (easily prevented by PPE for example) • Easily repairable effects of structural (building) damage

Classification of Probability

Table B Classification of Probability	
Classification	Definition
High	<ul style="list-style-type: none"> • There is a complete pollution linkage and an event appears very likely to occur in the short term and is inevitable in the long term. • Evidence of harm to the receptor
Medium	<ul style="list-style-type: none"> • There is a complete pollution linkage which means that it is probable that an event will occur • The event is not inevitable but possible in short term and likely in the long term
Low	<ul style="list-style-type: none"> • There is a complete pollution linkage and circumstances are possible under which an event could occur • It is not certain that an event will occur in the long term, and it is less likely to occur in the short term
Negligible	<ul style="list-style-type: none"> • There is a complete pollution linkage but circumstances are such that it is improbable that an event would occur even in the long term

Risk Assessment Matrix

By comparing the consequences of a risk and the probability of the risk of a pollution linkage, the likely risk category can be determined as shown in **Table C** below.

Table C Risk Assessment Matrix					
Increasing acceptability 		Consequence			
		Severe	Medium	Mild	Negligible
Probability	High	High	High	Medium / Low	Near zero
	Medium	High	Medium	Low	Near zero
	Low	High / medium	Medium / Low	Low	Near zero
	Negligible	High / medium / Low	Medium / Low	Low	Near zero

High Risk

There is a high probability that severe harm could risk a receptor, or there is evidence that a receptor is being harmed. The risk if realised is likely to result in liability, and urgent investigation or remediation will be required.

Medium Risk

It is probable that harm will arise to a receptor. However it is relatively unlikely that such harm would be severe, or if harm does occur the harm is likely to be relatively mild. Investigation will be required to determine the liability, and some remedial works may be required in the long term.

Low Risk

It is possible that harm may arise to a receptor, but it is likely that the harm would be mild.

Near Zero Risk

There is a very low risk of harm to the receptor. In the event of harm being realised the harm is not likely to be severe.

ANNEX C
Rotary Borehole Logs



Terra Firma (Wales) Limited
5 Deryn Court, Wharfedale Road
Pentwyn, Cardiff
CF23 7HA

Tel: 02920 735354
info@terrafirmawales.co.uk
www.terrafirmawales.co.uk

Borehole No.

BH01

Sheet 1 of 2

Project Name:	CELSA Asphalt Plant	Project No:	15264	Co-ords:		Hole Type	RO
Location:		Level:				Scale	1:100
Client:		Dates:	02/04/2019 -			Logged By	

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Well	Legend	Stratum Description	
	Depth (m)	Type	Results						
								CONCRETE over MADE GROUND: Recovered as grey to black granular material with traces of clay. Very slow drill due to density.	1
									2
									3
									4
									5
									6
									7
				7.50				Soft, CLAY (DRILLERS DESCRIPTION)	8
									9
									10
									11
									12
									13
									14
									15
									16
				16.40				Weathered MARL (DRILLERS DESCRIPTION)	17
									18
									19
									20

Remarks: Slow drilling through made ground due to density. Sampling could recover up to gravel grade although cobbles and boulders likely to be present



Terra Firma (Wales) Limited
5 Deryn Court, Wharfedale Road
Pentwyn, Cardiff
CF23 7HA

Tel: 02920 735354
info@terrafirmawales.co.uk
www.terrafirmawales.co.uk

Borehole No.

BH01

Sheet 2 of 2

Project Name: CELSA Asphalt Plant

Project No:
15264

Co-ords:

Hole Type
RO

Location:

Level:

Scale
1:100

Client:

Dates: 02/04/2019 -

Logged By

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Well	Legend	Stratum Description	
	Depth (m)	Type	Results						
				21.00				Weathered MARL (DRILLERS DESCRIPTION)	
								End of Borehole at 21.000m	21
									22
									23
									24
									25
									26
									27
									28
									29
									30
									31
									32
									33
									34
									35
									36
									37
									38
									39
									40

Remarks: Slow drilling through made ground due to density. Sampling could recover up to gravel grade although cobbles and boulders likely to be present



Terra Firma (Wales) Limited
5 Deryn Court, Wharfedale Road
Pentwyn, Cardiff
CF23 7HA

Tel: 02920 735354
info@terrafirmawales.co.uk
www.terrafirmawales.co.uk

Borehole No.

BH01A

Sheet 1 of 1

Project Name:	CELSA Asphalt Plant	Project No:	15264	Co-ords:		Hole Type	RO
Location:		Level:				Scale	1:100
Client:		Dates:	02/04/2019 -			Logged By	

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Well	Legend	Stratum Description	
	Depth (m)	Type	Results						
	1.50	SPT	50 (25 for 75mm/50 for 285mm)					CONCRETE over MADE GROUND: Recovered as grey to black granular material with traces of clay. Very slow drill due to density.	1
	3.00	SPT	50 (25 for 145mm/50 for 285mm)						2
	4.50	SPT	50 (25 for 85mm/50 for 245mm)						3
	6.00	SPT	50 (25 for 95mm/50 for 225mm)						4
	7.50	SPT	N=1 (1,1/0,0,0,1)	7.30 7.50				Very soft CLAY	5
								End of Borehole at 7.500m	6
									7
									8
									9
									10
									11
									12
									13
									14
									15
									16
									17
									18
									19
									20

Remarks: Slow drilling through made ground due to density. Sampling could recover up to gravel grade although cobbles and boulders likely to be present



Terra Firma (Wales) Limited
5 Deryn Court, Wharfedale Road
Pentwyn, Cardiff
CF23 7HA

Tel: 02920 735354
info@terrafirmawales.co.uk
www.terrafirmawales.co.uk

Borehole No.

BH02

Sheet 1 of 2

Project Name: CELSA Asphalt Plant	Project No: 15264	Co-ords:	Hole Type RO
Location:		Level:	Scale 1:100
Client:		Dates: 03/04/2019 -	Logged By

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Well	Legend	Stratum Description	
	Depth (m)	Type	Results						
								COCONRETE over MADE GROUND: Recovered as grey to black granular material with traces of clay. Very slow drill due to density.	1
									2
									3
									4
									5
									6
									7
				7.30				Soft CLAY (DRILLERS DESCRIPTION)	8
									9
									10
	10.50	SPT	N=3 (1,0/1,0,1,1)						11
									12
									13
									14
	15.00	SPT	N=3 (1,1/1,0,1,1)	15.00				Weathered MARL (DRILLERS DESCRIPTION)	15
									16
									17
									18
	19.00	SPT	N=16 (3,3/3,4,5,4)						19
									20

Remarks: Slow drilling through made ground due to density. Sampling could recover up to gravel grade although cobbles and boulders likely to be present



Terra Firma (Wales) Limited
5 Deryn Court, Wharfedale Road
Pentwyn, Cardiff
CF23 7HA

Tel: 02920 735354
info@terrafirmawales.co.uk
www.terrafirmawales.co.uk

Borehole No.

BH02

Sheet 2 of 2

Project Name: CELSA Asphalt Plant

Project No:
15264

Co-ords:

Hole Type
RO

Location:

Level:

Scale
1:100

Client:

Dates: 03/04/2019 -

Logged By

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Well	Legend	Stratum Description	
	Depth (m)	Type	Results						
				21.00				Weathered MARL (DRILLERS DESCRIPTION)	
								End of Borehole at 21.000m	21
									22
									23
									24
									25
									26
									27
									28
									29
									30
									31
									32
									33
									34
									35
									36
									37
									38
									39
									40

Remarks: Slow drilling through made ground due to density. Sampling could recover up to gravel grade although cobbles and boulders likely to be present



Terra Firma (Wales) Limited
5 Deryn Court, Wharfedale Road
Pentwyn, Cardiff
CF23 7HA

Tel: 02920 735354
info@terrafirmawales.co.uk
www.terrafirmawales.co.uk

Borehole No.

BH02A

Sheet 1 of 1

Project Name:	CELSA Asphalt Plant	Project No:	15264	Co-ords:		Hole Type	RO
Location:		Level:				Scale	1:100
Client:		Dates:	03/04/2019 -			Logged By	

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Well	Legend	Stratum Description	
	Depth (m)	Type	Results						
	1.50	SPT	50 (25 for 95mm/50 for 240mm)					CONCRETE over MADE GROUND: Recovered as grey to black granular material with traces of clay. Includes fragments of brick, concrete, metal. Very slow drill due to density.	1
	3.00	SPT	50 (25 for 135mm/50 for 235mm)						2
	4.50	SPT	50 (25 for 130mm/50 for 240mm)						3
	6.00	SPT	50 (25 for 75mm/50 for 235mm)						4
				7.50					5
									6
									7
								End of Borehole at 7.500m	8
									9
									10
									11
									12
									13
									14
									15
									16
									17
									18
									19
									20

Remarks: Slow drilling through made ground due to density. Sampling could recover up to gravel grade although cobbles and boulders likely to be present



Terra Firma (Wales) Limited
5 Deryn Court, Wharfedale Road
Pentwyn, Cardiff
CF23 7HA

Tel: 02920 735354
info@terrafirmawales.co.uk
www.terrafirmawales.co.uk

Borehole No.

BH03

Sheet 1 of 2

Project Name: CELSA Asphalt Plant	Project No: 15264	Co-ords:	Hole Type RO
Location:		Level:	Scale 1:100
Client:		Dates: 04/04/2019 -	Logged By

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Well	Legend	Stratum Description	
	Depth (m)	Type	Results						
								CONCRETE over MADE GROUND: Recovered as grey to black granular material with traces of clay. Very slow drill due to density. Probably boulders present.	1
									2
									3
									4
									5
									6
									7
				7.70					
								Soft CLAY (DRILLERS DESCRIPTION)	8
									9
									10
									11
	12.00	SPT	N=1 (1,0/0,0,1,0)						12
									13
									14
									15
				15.20					
								WEATHERED MARL (DRILLERS DESCRIPTION)	16
									17
	16.50	SPT	N=18 (3,2/5,4,4,5)						18
									19
									20

Remarks: Slow drilling through made ground due to density. Sampling could recover up to gravel grade although cobbles and boulders likely to be present



Terra Firma (Wales) Limited
5 Deryn Court, Wharfedale Road
Pentwyn, Cardiff
CF23 7HA

Tel: 02920 735354
info@terrafirmawales.co.uk
www.terrafirmawales.co.uk

Borehole No.

BH03

Sheet 2 of 2

Project Name: CELSA Asphalt Plant Project No: 15264 Co-ords: Hole Type RO

Location: Level: Scale 1:100

Client: Dates: 04/04/2019 - Logged By

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Well	Legend	Stratum Description	
	Depth (m)	Type	Results						
				21.00				WEATHERED MARL (DRILLERS DESCRIPTION)	
								End of Borehole at 21.000m	21
									22
									23
									24
									25
									26
									27
									28
									29
									30
									31
									32
									33
									34
									35
									36
									37
									38
									39
									40

Remarks: Slow drilling through made ground due to density. Sampling could recover up to gravel grade although cobbles and boulders likely to be present



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5 Deryn Court, Wharfedale Road
Pentwyn, Cardiff
CF23 7HA

Tel: 02920 735354
info@terrafirmawales.co.uk
www.terrafirmawales.co.uk

Borehole No.

BH03A

Sheet 1 of 1

Project Name:	CELSA Asphalt Plant	Project No:	15264	Co-ords:		Hole Type	RO
Location:		Level:				Scale	1:100
Client:		Dates:	05/04/2019 -			Logged By	

Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Well	Legend	Stratum Description	
	Depth (m)	Type	Results						
	1.50	SPT	50 (25 for 95mm/50 for 235mm)					CONCRETE over MADE GROUND: Recovered as grey to black granular material with traces of clay. Includes brick, concrete, ash. Very slow drill due to density.	1
	3.00	SPT	50 (25 for 75mm/50 for 225mm)						2
	4.50	SPT	49 (25 for 105mm/49 for 255mm)						3
	6.00	SPT	49 (12,12/49 for 225mm)						4
	7.50	SPT	N=1 (4,1/0,1,0,0)	7.40 7.50					5
									6
									7
								Soft CLAY	8
								End of Borehole at 7.500m	9
									10
									11
									12
									13
									14
									15
									16
									17
									18
									19
									20

Remarks: Slow drilling through made ground due to density. Sampling could recover up to gravel grade although cobbles and boulders likely to be present

ANNEX D
Soil Chemical Test Results



Final Report

Report No.: 19-13444-1

Initial Date of Issue: 29-Apr-2019

Client Terra Firma (Wales) Ltd

Client Address: 5 Deryn Court
Wharfedale Road
Pentwyn
Cardiff
CF23 7HA

Contact(s): Dave Emanuel

Project 15264 CELSA A.P

Quotation No.: **Date Received:** 18-Apr-2019

Order No.: **Date Instructed:** 18-Apr-2019

No. of Samples: 3

Turnaround (Wkdays): 5 **Results Due:** 26-Apr-2019

Date Approved: 29-Apr-2019

Approved By:



Details: Martin Dyer, Laboratory Manager

Project: 15264 CELSA A.P

Client: Terra Firma (Wales) Ltd	Chemtest Job No.:				19-13444	19-13444	19-13444
Quotation No.:	Chemtest Sample ID.:				813478	813479	813480
	Sample Location:				BH01	BH02	BH03
	Sample Type:				SOIL	SOIL	SOIL
	Top Depth (m):				0.50	0.50	0.50
	Bottom Depth (m):				1.50	1.50	1.50
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD			
ACM Type	U	2192		N/A	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-
Moisture	N	2030	%	0.020	7.9	7.8	7.2
Soil Colour	N	2040		N/A	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Sand	Sand
pH	M	2010		N/A	9.8	11.6	10.1
Cyanide (Total)	M	2300	mg/kg	0.50	0.8	< 0.50	< 0.50
Sulphate (Acid Soluble)	M	2430	%	0.010	0.42	0.54	0.36
Arsenic	M	2450	mg/kg	1.0	29	24	28
Cadmium	M	2450	mg/kg	0.10	0.70	0.78	0.39
Chromium	M	2450	mg/kg	1.0	99	96	99
Mercury Low Level	M	2450	mg/kg	0.05	0.15	0.51	0.10
Copper	M	2450	mg/kg	0.50	68	61	37
Nickel	M	2450	mg/kg	0.50	40	34	37
Lead	M	2450	mg/kg	0.50	60	64	37
Selenium	M	2450	mg/kg	0.20	3.1	3.3	2.8
Zinc	M	2450	mg/kg	0.50	270	260	140
Chromium (Trivalent)	N	2490	mg/kg	1.0	99	96	99
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	9.4	< 1.0	9.3
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	170	56	130
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	1400	230	1100
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	23	< 1.0	37
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	1600	290	1300
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	1.9	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	8.3	16	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	230	390	160
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	94	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	330	400	160
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	2000	690	1400
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzoanthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzopyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0	< 2.0	< 2.0
PCB 28	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 52	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 118	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010

Project: 15264 CELSA A.P

Client: Terra Firma (Wales) Ltd	Chemtest Job No.:				19-13444	19-13444	19-13444
Quotation No.:	Chemtest Sample ID.:				813478	813479	813480
	Sample Location:				BH01	BH02	BH03
	Sample Type:				SOIL	SOIL	SOIL
	Top Depth (m):				0.50	0.50	0.50
	Bottom Depth (m):				1.50	1.50	1.50
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD			
PCB 153	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 138	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 180	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Total Phenols	M	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30
Organic Matter BS1377	N	2930	%	0.10	1.3	0.6	1.9

Results - 2 Stage WAC

Project: 15264 CELSA A.P

Chemtest Job No: 19-13444 Chemtest Sample ID: 813478 Sample Ref: Sample ID: Sample Location: BH01 Top Depth(m): 0.50 Bottom Depth(m): 1.50 Sampling Date:							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	M	%				[A] 1.7	3	5
Loss On Ignition	2610	M	%				4.5	--	10
Total BTEX	2760	M	mg/kg				[A] < 0.010	6	--
Total PCBs (7 Congeners)	2815	M	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	M	mg/kg				[A] 2000	500	--
Total (Of 17) PAH's	2700	N	mg/kg				< 2.0	100	--
pH	2010	M					9.8	--	>6
Acid Neutralisation Capacity	2015	N	mol/kg				0.052	--	To evaluate
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
Arsenic	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	2	25
Barium	1450	U	0.031	0.041	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	2	50	100
Mercury	1450	U	0.00067	< 0.00050	0.0013	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.027	0.0064	0.054	0.11	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	0.0012	< 0.010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0070	0.0042	0.014	0.048	0.1	0.5	7
Zinc	1450	U	0.013	0.0045	< 0.50	< 0.50	4	50	200
Chloride	1220	U	100	27	210	430	800	15000	25000
Fluoride	1220	U	2.3	1.6	4.6	18	10	150	500
Sulphate	1220	U	800	150	1600	2800	1000	20000	50000
Total Dissolved Solids	1020	N	1000	310	2100	4600	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	21	15	< 50	160	500	800	1000

Solid Information

Dry mass of test portion/kg	0.175
Moisture (%)	7.9

Leachate Test Information

Leachant volume 1st extract/l	0.335
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.366

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 15264 CELSA A.P

Chemtest Job No: 19-13444 Chemtest Sample ID: 813479 Sample Ref: Sample ID: Sample Location: BH02 Top Depth(m): 0.50 Bottom Depth(m): 1.50 Sampling Date:							Landfill Waste Acceptance Criteria Limits			
							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill	
Determinand	SOP	Accred.	Units							
Total Organic Carbon	2625	M	%							
Loss On Ignition	2610	M	%							
Total BTEX	2760	M	mg/kg							
Total PCBs (7 Congeners)	2815	M	mg/kg							
TPH Total WAC (Mineral Oil)	2670	M	mg/kg							
Total (Of 17) PAH's	2700	N	mg/kg							
pH	2010	M								
Acid Neutralisation Capacity	2015	N	mol/kg							
Eluate Analysis								Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg		
			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1				
Arsenic	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	2	25	
Barium	1450	U	0.050	0.074	< 0.50	0.70	20	100	300	
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5	
Chromium	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	10	70	
Copper	1450	U	0.0028	0.0011	< 0.050	< 0.050	2	50	100	
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2	
Molybdenum	1450	U	0.024	0.0073	< 0.050	0.10	0.5	10	30	
Nickel	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.4	10	40	
Lead	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.5	10	50	
Antimony	1450	U	< 0.0010	0.0013	< 0.010	0.011	0.06	0.7	5	
Selenium	1450	U	0.0074	0.0038	0.015	0.045	0.1	0.5	7	
Zinc	1450	U	0.014	0.0098	< 0.50	< 0.50	4	50	200	
Chloride	1220	U	130	42	250	570	800	15000	25000	
Fluoride	1220	U	1.9	0.80	3.8	10	10	150	500	
Sulphate	1220	U	440	96	880	1600	1000	20000	50000	
Total Dissolved Solids	1020	N	1200	600	2300	7000	4000	60000	100000	
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-	
Dissolved Organic Carbon	1610	U	26	18	51	190	500	800	1000	

Solid Information

Dry mass of test portion/kg	0.175
Moisture (%)	7.8

Leachate Test Information

Leachant volume 1st extract/l	0.335
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.322

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: 15264 CELSA A.P

Chemtest Job No: 19-13444							Landfill Waste Acceptance Criteria			
Chemtest Sample ID: 813480							Limits			
Sample Ref:							Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID:										
Sample Location: BH03										
Top Depth(m): 0.50										
Bottom Depth(m): 1.50										
Sampling Date:										
Determinand	SOP	Accred.	Units							
Total Organic Carbon	2625	M	%				3	5	6	
Loss On Ignition	2610	M	%				0.97	--	--	10
Total BTEX	2760	M	mg/kg				[A] < 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg				< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	M	mg/kg				[A] 1400	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg				< 2.0	100	--	--
pH	2010	M					10.1	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.022	--	To evaluate	To evaluate			
Eluate Analysis			2:1 mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg			
Arsenic	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	2	25	
Barium	1450	U	0.041	0.045	< 0.50	< 0.50	20	100	300	
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5	
Chromium	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	10	70	
Copper	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	2	50	100	
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2	
Molybdenum	1450	U	0.028	0.0070	0.056	0.11	0.5	10	30	
Nickel	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.4	10	40	
Lead	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.5	10	50	
Antimony	1450	U	0.0010	0.0012	< 0.010	0.012	0.06	0.7	5	
Selenium	1450	U	0.0079	0.0041	0.016	0.049	0.1	0.5	7	
Zinc	1450	U	0.017	0.0051	< 0.50	< 0.50	4	50	200	
Chloride	1220	U	98	25	200	400	800	15000	25000	
Fluoride	1220	U	2.6	2.0	5.2	21	10	150	500	
Sulphate	1220	U	820	170	1600	3000	1000	20000	50000	
Total Dissolved Solids	1020	N	1100	190	2200	3800	4000	60000	100000	
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-	
Dissolved Organic Carbon	1610	U	23	19	< 50	190	500	800	1000	

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	7.2

Leachate Test Information	
Leachant volume 1st extract/l	0.336
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.360

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request. The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
813478			BH01		A	Amber Glass 250ml
813478			BH01		A	Plastic Tub 1000g
813479			BH02		A	Amber Glass 250ml
813479			BH02		A	Plastic Tub 1000g
813480			BH03		A	Amber Glass 250ml
813480			BH03		A	Plastic Tub 1000g

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection

SOP	Title	Parameters included	Method summary
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenzo[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
2930	Organic Matter	Organic Matter	Acid Dichromate digestion/Titration
640	Characterisation of Waste (Leaching)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

- U UKAS accredited
- M MCERTS and UKAS accredited
- N Unaccredited
- S This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
- SN This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
- T This analysis has been subcontracted to an unaccredited laboratory
- I/S Insufficient Sample
- U/S Unsuitable Sample
- N/E not evaluated
- < "less than"
- > "greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.com

ANNEX E
Groundwater Chemical Test
Results



2183

Final Report

Report No.: 19-13651-1

Initial Date of Issue: 26-Apr-2019

Client Terra Firma (Wales) Ltd

Client Address: 5 Deryn Court
Wharfedale Road
Pentwyn
Cardiff
CF23 7HA

Contact(s): Dave Emanuel

Project 15264 - CELSA A.P.

Quotation No.: **Date Received:** 18-Apr-2019

Order No.: **Date Instructed:** 18-Apr-2019

No. of Samples: 6

Turnaround (Wkdays): 5 **Results Due:** 26-Apr-2019

Date Approved: 26-Apr-2019

Approved By:



Details: Glynn Harvey, Laboratory Manager

Project: 15264 - CELSA A.P.

Client: Terra Firma (Wales) Ltd					Chemtest Job No.:	19-13651	19-13651	19-13651	19-13651	19-13651	19-13651
Quotation No.:					Chemtest Sample ID.:	814555	814556	814557	814558	814559	814560
Sample Location:					BH01	BH01A	BH02	BH02A	BH03	BH03A	
Sample Type:					WATER	WATER	WATER	WATER	WATER	WATER	
Date Sampled:					16-Apr-2019	16-Apr-2019	16-Apr-2019	16-Apr-2019	16-Apr-2019	16-Apr-2019	
Determinand	Accred.	SOP	Units	LOD							
pH	U	1010		N/A	8.1	9.6	8.1	9.0	8.0	8.8	
Electrical Conductivity	U	1020	µS/cm	1.0	32000	3000	31000	2400	2300	2400	
Biochemical Oxygen Demand	N	1090	mg O2/l	4.0	71	10	72	6.2	32	7.2	
Chemical Oxygen Demand	U	1100	mg O2/l	10	290	41	290	25	130	29	
Sulphate	U	1220	mg/l	1.0	960	510	960	500	300	490	
Cyanide (Total) Low-Level	N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
Sulphide	U	1325	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	
Hardness	N	1415	mg/l	1.0	7400	580	7700	620	490	500	
Arsenic (Dissolved)	U	1450	µg/l	1.0	29	5.5	27	2.7	13	2.7	
Cadmium (Dissolved)	U	1450	µg/l	0.080	0.10	< 0.080	0.097	< 0.080	< 0.080	< 0.080	
Chromium (Dissolved)	U	1450	µg/l	1.0	68	10	66	8.3	42	4.7	
Copper (Dissolved)	U	1450	µg/l	1.0	33	9.1	88	4.8	48	3.4	
Nickel (Dissolved)	U	1450	µg/l	1.0	2.7	< 1.0	2.6	< 1.0	1.6	< 1.0	
Lead (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0	
Selenium (Dissolved)	U	1450	µg/l	1.0	< 1.0	20	< 1.0	19	47	19	
Zinc (Dissolved)	U	1450	µg/l	1.0	15	7.5	16	7.5	11	6.0	
Mercury Low Level	U	1460	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Chromium (Trivalent)	N	1490	µg/l	20	68	< 20	66	< 20	42	< 20	
Chromium (Hexavalent)	U	1490	µg/l	20	< 20	< 20	< 20	< 20	< 20	< 20	
Aliphatic TPH >C5-C6	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C6-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aliphatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Total Aliphatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Aromatic TPH >C5-C7	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C7-C8	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C8-C10	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C10-C12	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C12-C16	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C16-C21	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C21-C35	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aromatic TPH >C35-C44	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Total Aromatic Hydrocarbons	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Total Petroleum Hydrocarbons	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10	
Naphthalene	N	1800	µg/l	0.010	< 0.010	1.0	< 0.010	< 0.010	< 0.010	< 0.010	
Acenaphthylene	N	1800	µg/l	0.010	< 0.010	1.9	< 0.010	< 0.010	< 0.010	< 0.010	
Acenaphthene	N	1800	µg/l	0.010	< 0.010	1.9	< 0.010	< 0.010	< 0.010	< 0.010	

Results - Water

Client: Terra Firma (Wales) Ltd	Chemtest Job No.:				19-13651	19-13651	19-13651	19-13651	19-13651	19-13651
Quotation No.:	Chemtest Sample ID.:				814555	814556	814557	814558	814559	814560
	Sample Location:				BH01	BH01A	BH02	BH02A	BH03	BH03A
	Sample Type:				WATER	WATER	WATER	WATER	WATER	WATER
	Date Sampled:				16-Apr-2019	16-Apr-2019	16-Apr-2019	16-Apr-2019	16-Apr-2019	16-Apr-2019
Determinand	Accred.	SOP	Units	LOD						
Fluorene	N	1800	µg/l	0.010	< 0.010	2.2	< 0.010	< 0.010	< 0.010	< 0.010
Phenanthrene	N	1800	µg/l	0.010	< 0.010	3.5	< 0.010	< 0.010	< 0.010	< 0.010
Anthracene	N	1800	µg/l	0.010	< 0.010	1.5	< 0.010	< 0.010	< 0.010	< 0.010
Fluoranthene	N	1800	µg/l	0.010	< 0.010	0.65	< 0.010	< 0.010	< 0.010	< 0.010
Pyrene	N	1800	µg/l	0.010	< 0.010	0.66	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]anthracene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chrysene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[b]fluoranthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[k]fluoranthene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]pyrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Of 6 PAH's	N	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
PCB 28	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 52	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 118	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 153	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 138	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
PCB 180	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 congeners)	N	1815	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Resorcinol	U	1920	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Phenol	U	1920	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Cresols	U	1920	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Xylenols	U	1920	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
1-Naphthol	N	1920	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Trimethylphenols	U	1920	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1090	Biochemical Oxygen Demand	Biochemical Oxygen demand (BOD)	Colorimetric determination of dissolved oxygen in seeded sample after 5 days incubation at 20°C.
1100	Chemical Oxygen Demand	Chemical Oxygen demand (COD)	Dichromate oxidation of organic matter in sample followed by colorimetric determination of residual Cr[VI].
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1325	Sulphide in Waters	Sulphides	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using N,N-dimethyl-p-phenylenediamine.
1415	Cations in Waters by ICP-MS	Sodium; Potassium; Calcium; Magnesium	Direct determination by inductively coupled plasma - mass spectrometry (ICP-MS).
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.
1670	Total Petroleum Hydrocarbons (TPH) in Waters by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO	Pentane extraction / GC FID detection
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35–C44 Aromatics: >C5–C7, >C7–C8, >C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35–C44	Pentane extraction / GCxGC FID detection
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenzo[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
1815	Polychlorinated Biphenyls (PCB) ICES7 Congeners in Waters by GC-MS	ICES7 PCB congeners	Solvent extraction / GCMS detection
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.

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ANNEX F
Gas Monitoring Results

DATE	16/04/2019						
AP (mB)	1016						
	Depth to G.W. (m. bgl)	O2 (%)	CO2 (%)	CH4 (%)	CO (ppm)	H2S (ppm)	Flow (l/hr)
BH01	4.61	20.1	0.1	0.4	0	0	0.0
BH01A	7.62	17.1	1.4	4.8	0	0	0.0
BH02	7.52	0.2	0.1	47.7	0	0	0.1
BH02A	4.65	20.2	0.1	0.4	0	0	0.0
BH03	7.54	20.1	0	0.1	0	0	0.0
BH03A	4.59	20	0.1	0.2	0	0	0.0

ANNEX G
Hazwaste Report

Waste Classification Report



H82PW-K54PJ-VHKHT

Job name

CELSA Asphalt Plant

Description/Comments

15264

Project

Site

Related Documents

#	Name	Description
None		

Waste Stream Template

Terrachem 4

Classified by

Name:
Dave Emanuel
Date:
30 Apr 2019 08:54 GMT
Telephone:
029 2073 5354

Company:
Terra Firma
5 Deryn Court, Wharfedale Road
Pentwyn
Cardiff
CF23 7HB

Report

Created by: Dave Emanuel
Created date: 30 Apr 2019 08:54 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	BH01	0.5 - 1.5	Non Hazardous		2
2	BH02	0.5 - 1.5	Hazardous	HP 8	5
3	BH03	0.5 - 1.5	Non Hazardous		8

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	11
Appendix B: Rationale for selection of metal species	12
Appendix C: Version	13

Classification of sample: BH01

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
BH01	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.5 - 1.5 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
7.9%	
(wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 7.9% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	arsenic { arsenic trioxide }				29 mg/kg	1.32	35.265 mg/kg	0.00353 %		✓	
	033-003-00-0	215-481-4	1327-53-3								
2	cadmium { cadmium oxide }				0.7 mg/kg	1.142	0.736 mg/kg	0.0000736 %		✓	
	048-002-00-0	215-146-2	1306-19-0								
3	chromium in chromium(III) compounds { chromium(III) oxide }				99 mg/kg	1.462	133.263 mg/kg	0.0133 %		✓	
		215-160-9	1308-38-9								
4	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %			<LOD
	024-001-00-0	215-607-8	1333-82-0								
5	copper { dicopper oxide; copper (I) oxide }				68 mg/kg	1.126	70.512 mg/kg	0.00705 %		✓	
	029-002-00-X	215-270-7	1317-39-1								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	60 mg/kg		55.26 mg/kg	0.00553 %		✓	
	082-001-00-6										
7	mercury { mercury dichloride }				0.15 mg/kg	1.353	0.187 mg/kg	0.0000187 %		✓	
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel sulfate }				40 mg/kg	2.637	97.135 mg/kg	0.00971 %		✓	
	028-009-00-5	232-104-9	7786-81-4								
9	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				3.1 mg/kg	2.554	7.291 mg/kg	0.000729 %		✓	
	034-002-00-8										
10	zinc { zinc sulphate }				270 mg/kg	2.469	614.04 mg/kg	0.0614 %		✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	TPH (C6 to C40) petroleum group		TPH		2000 mg/kg		1842 mg/kg	0.184 %		✓	
12	confirm TPH has NOT arisen from diesel or petrol				☑						
13	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-020-00-8	200-753-7	71-43-2								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
14	toluene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
15	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
16	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				0.8 mg/kg	1.884	1.388 mg/kg	0.000139 %		✓	
	006-007-00-5										
18	pH				9.8 pH		9.8 pH	9.8 pH			
19	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
20	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		205-917-1	208-96-8								
21	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		201-469-6	83-32-9								
22	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		201-695-5	86-73-7								
23	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		201-581-5	85-01-8								
24	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		204-371-1	120-12-7								
25	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		205-912-4	206-44-0								
26	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		204-927-3	129-00-0								
27	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
28	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
29	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
30	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
31	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
32	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		205-893-2	193-39-5								
33	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
34	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		205-883-8	191-24-2								
35	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
36	polychlorobiphenyls; PCB				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	602-039-00-4	215-648-1	1336-36-3								
Total:									0.286 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and ≤ 75°C"

Force this Hazardous property to non hazardous because No Free product noted

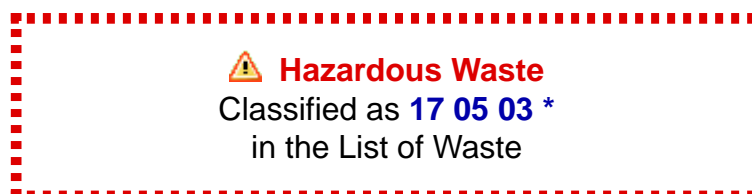
Hazard Statements hit:

Fam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.184%)

Classification of sample: BH02



Sample details

Sample Name:	LoW Code:
BH02	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.5 - 1.5 m	Entry:
Moisture content:	17 05 03 * (Soil and stones containing hazardous substances)
7.8%	
(wet weight correction)	

Hazard properties

HP 8: Corrosive "waste which on application can cause skin corrosion"

pH; pH "Assumed to be irritant/corrosive because of pH value"

Because of determinand:

pH: (conc.: 11.6 pH)

Determinands

Moisture content: 7.8% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				24 mg/kg	1.32	29.216 mg/kg	0.00292 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	cadmium { cadmium oxide }				0.78 mg/kg	1.142	0.822 mg/kg	0.0000822 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
3	chromium in chromium(III) compounds { chromium(III) oxide }				96 mg/kg	1.462	129.365 mg/kg	0.0129 %	✓	
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
5	copper { dicopper oxide; copper (I) oxide }				61 mg/kg	1.126	63.322 mg/kg	0.00633 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	64 mg/kg		59.008 mg/kg	0.0059 %	✓	
	082-001-00-6									
7	mercury { mercury dichloride }				0.51 mg/kg	1.353	0.636 mg/kg	0.0000636 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
8	nickel { nickel sulfate }				34 mg/kg	2.637	82.655 mg/kg	0.00827 %	✓	
	028-009-00-5	232-104-9	7786-81-4							
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				3.3 mg/kg	2.554	7.77 mg/kg	0.000777 %	✓	
	034-002-00-8									
10	zinc { zinc sulphate }				260 mg/kg	2.469	591.94 mg/kg	0.0592 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
11	TPH (C6 to C40) petroleum group				690	mg/kg		636.18	mg/kg	0.0636 %	✓	
			TPH									
12	confirm TPH has NOT arisen from diesel or petrol				<input checked="" type="checkbox"/>							
13	benzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
14	toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
15	ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
16	xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
	006-007-00-5											
18	pH				11.6	pH		11.6	pH	11.6 pH		
			PH									
19	naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
20	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8									
21	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9									
22	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7									
23	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8									
24	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7									
25	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0									
26	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0									
27	benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
28	chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
29	benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
30	benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
31	benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
32	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5									
33	dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
34	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2									
35	phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
36	polychlorobiphenyls; PCB				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3									
Total:										0.16 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No Free product noted

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0636%)

Classification of sample: BH03

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
BH03	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.5 - 1.5 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
7.2%	
(wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 7.2% Wet Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	arsenic { arsenic trioxide }				28 mg/kg	1.32	34.307 mg/kg	0.00343 %		✓	
	033-003-00-0	215-481-4	1327-53-3								
2	cadmium { cadmium oxide }				0.39 mg/kg	1.142	0.413 mg/kg	0.0000413 %		✓	
	048-002-00-0	215-146-2	1306-19-0								
3	chromium in chromium(III) compounds { chromium(III) oxide }				99 mg/kg	1.462	134.276 mg/kg	0.0134 %		✓	
		215-160-9	1308-38-9								
4	chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.5 mg/kg	1.923	<0.962 mg/kg	<0.0000962 %			<LOD
	024-001-00-0	215-607-8	1333-82-0								
5	copper { dicopper oxide; copper (I) oxide }				37 mg/kg	1.126	38.659 mg/kg	0.00387 %		✓	
	029-002-00-X	215-270-7	1317-39-1								
6	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	37 mg/kg		34.336 mg/kg	0.00343 %		✓	
	082-001-00-6										
7	mercury { mercury dichloride }				0.1 mg/kg	1.353	0.126 mg/kg	0.0000126 %		✓	
	080-010-00-X	231-299-8	7487-94-7								
8	nickel { nickel sulfate }				37 mg/kg	2.637	90.533 mg/kg	0.00905 %		✓	
	028-009-00-5	232-104-9	7786-81-4								
9	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				2.8 mg/kg	2.554	6.635 mg/kg	0.000664 %		✓	
	034-002-00-8										
10	zinc { zinc sulphate }				140 mg/kg	2.469	320.811 mg/kg	0.0321 %		✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
11	TPH (C6 to C40) petroleum group		TPH		1400 mg/kg		1299.2 mg/kg	0.13 %		✓	
12	confirm TPH has NOT arisen from diesel or petrol				☑						
13	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	601-020-00-8	200-753-7	71-43-2								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	toluene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
15	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
16	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
17	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
	006-007-00-5									
18	pH				10.1 pH		10.1 pH	10.1 pH		
19	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
20	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
21	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
22	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
23	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
24	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
25	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
26	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
27	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
28	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
29	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
30	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
31	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
32	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
33	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
34	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
35	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
36	polychlorobiphenyls; PCB				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	602-039-00-4	215-648-1	1336-36-3							
Total:								0.196 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and ≤ 75°C"

Force this Hazardous property to non hazardous because No Free product noted

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.13%)

Appendix A: Classifier defined and non CLP determinands

■ **chromium(III) oxide** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Repr. 1B H360FD , Skin Sens. 1 H317 , Resp. Sens. 1 H334 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302 , Acute Tox. 4 H332

■ **lead compounds with the exception of those specified elsewhere in this Annex (worst case)**

CLP index number: 082-001-00-6

Description/Comments: Worst Case: IARC considers lead compounds Group 1; Carcinogenic to humans; Lead REACH Consortium considers some lead compounds Carcinogenic category 1A

Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)

Additional Hazard Statement(s): Carc. 1A H350

Reason for additional Hazards Statement(s)/Risk Phrase(s):

03 Jun 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html (worst case lead compounds). Review date 29/09/2015

■ **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: Aquatic Chronic 2 H411 , Repr. 2 H361d , Carc. 1B H350 , Muta. 1B H340 , STOT RE 2 H373 , Asp. Tox. 1 H304 , Flam. Liq. 3 H226

■ **confirm TPH has NOT arisen from diesel or petrol**

Description/Comments: Chapter 3, section 4b requires a positive confirmation for benzo[a]pyrene to be used as a marker in evaluating Carc. 1B; H350 (HP 7) and Muta. 1B; H340 (HP 11)

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

■ **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4

Description/Comments:

Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)

Additional Hazard Statement(s): Carc. 2 H351

Reason for additional Hazards Statement(s)/Risk Phrase(s):

03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

■ **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

CLP index number: 006-007-00-5

Description/Comments: Conversion factor based on a worst case compound: sodium cyanide

Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)

Additional Hazard Statement(s): EUH032 >= 0.2 %

Reason for additional Hazards Statement(s)/Risk Phrase(s):

14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

■ **pH** (CAS Number: PH)

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

■ **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 1 H310 , Acute Tox. 1 H330 , Acute Tox. 4 H302

■ **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Aquatic Chronic 2 H411 , Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319

■ **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400

■ **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Skin Irrit. 2 H315 , Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Sens. 1 H317 , Carc. 2 H351 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302

■ **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Sens. 1 H317 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319

■ **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Acute Tox. 4 H302

■ **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 21 Aug 2015

Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Skin Irrit. 2 H315

■ **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 06 Aug 2015

Hazard Statements: Carc. 2 H351

■ **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 23 Jul 2015

Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400

■ **polychlorobiphenyls; PCB** (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4

Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.

Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)

Additional Hazard Statement(s): Carc. 1A H350

Reason for additional Hazards Statement(s)/Risk Phrase(s):

29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds (edit as required)

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. (edit as required) Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history (edit as required)

chromium in chromium(III) compounds {chromium(III) oxide}

Oxidation State of Cr is 3+

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments (edit as required)

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. (edit as required) Worst case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected. (edit as required)

lead {lead compounds with the exception of those specified elsewhere in this Annex (worst case)}

No Cr6

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

nickel {nickel sulfate}

No Cr6

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil. (edit as required)

zinc {zinc sulphate}

No Cr6

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide] (edit as required)

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition v1.1, May 2018**

HazWasteOnline Classification Engine Version: 2019.115.3847.7849 (25 Apr 2019)

HazWasteOnline Database: 2019.115.3847.7849 (25 Apr 2019)

This classification utilises the following guidance and legislation:

WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014

7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010