



1ST HORIZON

PHASE 02 GROUND INVESTIGATION REPORT (REF: SL01-R12)

Client: **Department for Education (DfE)**

Project: **Sandilands Community Primary School**

Date: **29/09/2021**



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1. INTRODUCTION

Department for Education (DfE) propose to construct new teaching facilities at Sandilands Community Primary (CP) School, Manchester. Exact development details are not available however it is understood this will involve the construction of a new school building.

Prior to development F & G have been appointed by the DfE to undertake a Phase I desk study and Phase II site investigation and produce an interpretive geo-environmental report for the development.

This report presents the findings of the desk study and site investigation and gives geotechnical recommendations for the potential development. In addition, conceptual ground models are given.

NOTE: The exact development plans have not been disclosed, only areas of potential development.

Document Name						
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SRP1034	1HZ	ZZ	XX	T	Y	0008
Document Description				Document Status		
Sandilands Intrusive Geotechnical and Geo-environmental Investigation				S0 – Initial status		
Document Classification						
PM 30 20 33 Geotechnical Survey Report						

2. THE SITE

2.1 Site Location and Description

Located off Wendover Road, Manchester at National grid reference SJ 796 896, the site is currently occupied by a single school building, with a hardstanding playing area to the west and grassed playing fields to the north.

The school site itself is roughly square in shape measuring 150x180m. A topographical survey is available which shows the site to be largely flat lying, at around 28.50mAOD. Site boundaries are a mixture of metal palisade fencing along the northern boundary with Wendover road, with the remainder hedgerows and mature trees.

The proposed development area comprises a generally level unfenced area to the rear of the school, see **Figure 4**. The area is a combination of concrete and asphalt hardstanding to the south and grass to the north, the area is crossed by a number of buried services including electricity, surface and foul water. In addition there are two shipping containers located in the southeastern corner.

A photographic survey of the site is included as **Appendix A**

2.2 Geology

The geology of the site has been studied using the BGS 1:50,000 map, Sheet 98, Stockport, along with the associated memoirs, see **Reference 1**.

These show the site to be underlain by glaciofluvial sheet deposits comprising sands and gravels, originating from glacial meltwater.

The site is bisected by an unnamed fault trending northwest-southeast. This fault line acts as a boundary between two rock units, the Tarporley Siltstone formation to the west, comprising interbedded siltstone, mudstones and sandstones, and the Bolin Mudstone member to the east, comprising reddish-brown and grey siltstones.

The bedrock is designated as a Secondary Aquifer, B, while the superficial deposits are designated as a Secondary Aquifer, A, both of high vulnerability.

2.3 History

The history of the site has been studied using old Ordnance Survey Maps dating from 1876. All plans are at a scale of 1:2,500 unless otherwise stated.

The 1876 OS plan shows the site to be within open fields, divided by field boundaries marked with trees. A pond like feature is shown in the southwestern corner of the site. The immediate area around the site is open fields, with Baguley House farm located some 200m south, and Maple Farm 100m north and a wooded area immediately north of the site, see **Figure 3a**.

The 1898 OS plan shows no significant changes to the site; however, the surrounding area has undergone significant clearance work, with the removal of several field boundaries and mixed woodland areas. A drainage ditch is noted trending northwest southeast, towards the eastern boundary of the site, see **Figure 3b**.

No changes recorded on the 1910 OS plan, see **Figure 3c**.

The 1935 OS plan shows no significant changes to the site, however Sandilands Road now forms the southern site boundary with significant urbanization of the surrounding area, see **Figure 3d**.

The 1954 OS plan at 1:10,000 shows no significant changes to the site. It also shows including the town of Timperley to the southwest and further residential development towards the northwest of the site, see **Figure 3e**.

By 1959, the OS plan now shows that Sandilands County Primary School had been constructed in the southern half of the site, with the northern section of the site given over to the playing fields. The pond and ditch are no longer recorded on site. There had been significant residential development within the immediate vicinity of the site, particularly to the east and south, see **Figure 3f**.

No significant changes were recorded on the 1969 OS Plan, see **Figure 3g**.

No significant changes are noted on the 1992 OS plan to the site apart from the addition of an asphalt yard on the southern boundary of the site, see **Figure 3h**.

The Aerial photograph published in 2000 shows the existing school building on site with associated playing fields. A row of trees are visible along the appropriate line of the ditch, suggesting it could still exist, see **Figure 3i**.

3. ENVIRONMENTAL SEARCHES

An Envirocheck Report was obtained for the purpose of this investigation. The main findings are summarized below, with the report presented in full in **Appendix B**.

3.1 Agency and Hydrological

- There is potential for groundwater flooding to occur at surface,
- The closest active LAPPC is 634m south east of the site,
- The nearest surface water feature is located on site,
- The closest pollution incident to controlled waters was 270m south of the site and was a category 3- minor incident,
- There are no water abstractions within 500m of the site.

3.2 Waste

The closest potentially infilled land (water) is located on site,

3.3 Geological

The BGS have provided an estimate of the soil chemistry at the site as follows:

- Arsenic <15 mg/kg,
- Cadmium <1.8 mg/kg,
- Chromium 60 – 90 mg/kg,
- Lead 100 – 200 mg/kg,
- Nickel <15 mg/kg.

The following geological information has also been provided:

- The potential to encounter collapsible ground is very low,
- There are no compressible ground hazards,
- There are no ground dissolution hazards,
- The potential to encounter running sands is very low,
- There are no shrinking or swelling clay hazards,

- The property is in a lower probability radon area where less than 1% of homes are estimated to be at or above the action level. Therefore, no radon protective measures are necessary in the construction of new dwellings or extensions.

3.4 Industrial Land Use

- The closest active contemporary trade directory is 313m northeast of the site and is a cleaning service,
- There are no fuel station entries within 500m of the site.

3.5 Unexploded Ordnance

The UXO desk study, **Appendix C**, identifies the risk of both German and allied UXO at shallow depth as low. The report does identify a slightly elevated risk associated with deep UXO.

4. PROPOSED DEVELOPMENT

It is proposed to develop a new school building within the site boundary. Current plans suggest a new build block of 1,896m² replacing 3,020m² of teaching accommodation. Further details of the proposed development are not yet available, however **Figure 4** shows the proposed development area.

Based on previous experience, the development is likely to comprise a lightly loaded two/three storey conventional brick or timber structure, with conventional strip foundations with line loads in the region of 50kN/m run and floor loadings no greater than 5kN/m². Development levels have not yet been set, but are anticipated to be at/close to existing grade.

The recommendations in this report are based on these assumptions, consequently, they should be reviewed, and if necessary revised during the detailed design.

5. SITE INVESTIGATIONS

5.1 Site Location and Description

The site investigation was undertaken on the 12th and 13th August 2021, and comprised:

- Two cable percussion boreholes to a maximum depth of 8.45m,
- Eight windowless samples to a maximum depth of 5.00m,
- Eight Dynamic Cone Penetration tests to a depth of 1.00m to determine CBR value

The exploratory holes were supervised and logged by an engineer in general accordance with BS 5930, **Reference 2**.

The location of the site investigation exploratory holes were determined, and the locations are presented in **Figure 2**.

The logs for the above work are presented in the following Appendices:

- **Appendix D** - Exploratory Hole Logs
- **Appendix E** - DCP Test results

5.2 Laboratory Testing

5.2.1 Physical Testing

Soil samples were recovered from the exploratory holes for physical testing, which comprised the following parameters:

- Atterberg Limits
- Particle Size Distribution
- pH and Sulphate

The testing was carried out in accordance with BS 1377, **Reference 3**. The results are discussed in **Section 6**, with the full results presented in Full in **Appendix F**.

5.2.2 Chemical Testing

Samples of the made ground were placed in the appropriate containers and a cool box, and taken immediately to the laboratories of DETS in County Durham for the following chemical testing:

- **Metals & Non-metals** - Arsenic (As), Boron (B), Cadmium (Cd), Chromium (hexavalent), Chromium (Trivalent), Copper (Cu), Lead (Pb), Mercury (Hg), Nickel (Ni), Phenol, Selenium (Se), and Zinc (Zn).

- **Petroleum Hydrocarbons** - Benzene, Toluene, Ethylbenzene, o-xylene, m-xylene, p-xylene, Aliphatics >C5 – C44, Aromatics >EC5 – EC44.
- **Polyaromatic Hydrocarbons (PAH)** - Acenaphthene, Acenaphthylene, Anthracene, Benzo (a) Anthracene, Benzo (a) pyrene, Benzo (b) fluoranthene, Benzo (g, h, i) perylene, Benzo (k) fluoranthene, Chrysene, Dibenzo (a, h) anthracene, Fluorene, Fluoranthene, Indeno (1,2,3-cd) pyrene, Naphthalene, Phenanthrene, Pyrene.
- **Other Contaminants** - Sulphide (easily liberated), Water soluble Sulphate (2:1 extract), Cyanide, pH, Soil Organic Matter (SOM), Asbestos screening.

The results are summarised in **Section 7**, with the results presented in full in **Appendix G**

6. GROUND CONDITIONS

6.1 General Stratigraphy

With the exception of WS08, the ground conditions encountered were generally consistent across the site, comprising a layer of topsoil of between 0.40m to 0.80m overlying fluvioglacial deposits proven to a maximum depth of 5.00m. The deeper cable percussion holes BH01 & 02 encountered the underlying glacial till to a maximum depth of 7.60m and weathered rock head was proven to a depth of 8.45m. Where holes were completed in hardstandings topsoil was replaced by a thin layer of made ground associated with pavement construction.

WS08 was located in the area of a former pond and encountered made ground down to a depth 4.70m before proving the natural Glacial Till deposits

The general stratigraphy encountered in the exploratory holes is summarised in the **Table 6.1** below:

Table 6.1: General Stratigraphy

BH No.	Topsoil (mbgl)	Made Ground (mbgl)	Fluvio glacial deposits (mbgl)	Glacial Till (mbgl)	Weathered Tarporly Siltstone (mbgl)
BH01	0.80	-	2.80	7.20	7.95*
BH02	0.70	-	2.60	7.60	8.45*
WS01	0.70	-	3.20	5.45*	
WS02	0.55	-	3.50	5.45*	
WS03	0.40	-	5.45*	-	
WS04	-	0.45	5.45*	-	
WS05	0.65	-	2.00*	-	
WS06	-	0.60	3.40	5.45*	
WS07	-	0.50	3.00*	-	
WS08	-	4.70	-	5.45*	

- Material not encountered

* Maximum proven depth

6.2 Topsoil

Where encountered the topsoil was described as Grass over loose brown gravelly Sand. Gravel is fine to coarse of mixed lithologies

pH values of between 7.0 and 6.1 were recorded, with a sulphate value, when measured as 2:1 water extract of between 140 and 21mg/l.

6.3 Made Ground

Where exploratory holes were completed in areas of hardstanding they encountered a thin layer of made ground. This material generally comprised a layer of asphalt or macadam surfacing up to 0.15m underlain

by a grey/black loose to medium dense sand and gravel of brick and concrete, most likely recycled aggregate used as subbase for the surfacing.

WS08 however encountered a significant thickness of made ground extending down to a depth of 4.70m. The upper 0.40m comprised surfacing and subbase, the remainder was made up of a loose ashy gravelly sand overlying a soft black sandy gravelly clay. It is anticipated this deep made ground is associated with the backfilling of a former pond identified at desk study stage.

A total of 4 Standard Penetration Tests (SPT) were undertaken within the made ground recording N-Values of between 4 and 7 (loose) which is consistent with the engineer's description.

A pH value of 7.4, with a sulphate value, when measured as 2:1 water extract of 29mg/l.

6.4 Fluvioglacial Deposits

Fluvioglacial deposits were encountered in all the exploratory holes proven to a maximum depth of 5.45mbgl the material was generally described as a loose to medium dense gravelly sand to sand and gravel.

A total of 27 Standard Penetration Tests (SPT) were undertaken within the fluvioglacial materials recording N-Values of between 6 (loose) and 17 (medium dense) with an average value of 10. When plotted against reduced level, see **Figure 5**, there is no discernible improvement with depth.

pH and sulphate testing was completed recording a pH value of 8.5 and sulphate value, when measured as 2:1 water extract of between 47mg/l

A single Particle Size Distribution (PSD) test was undertaken on a bulk sample describing a silty sand and gravel

6.5 Glacial Till

Glacial Till was encountered underlying the fluvioglacial deposits at a depth of between 2.60m and 3.50m. Described as a soft to firm brown slightly sandy gravelly clay, these were proven to a maximum depth of 7.60m

Sixteen Standard Penetration Tests (SPT) were undertaken within the fluvioglacial materials recording N-Values of between 4 and 14 which is broadly consistent with the engineer's description. When plotted against reduced level, **Figure 5** there is no discernible improvement with depth.

A single classification test was completed on a sample of the glacial till at 3.00m which recorded a clay of low plasticity.

6.6 Tarporley Siltstone

The underlying solid geology comprising the weathered Tarporley Siltstone, described as a very weak to weak brownish grey Siltstone was encountered in exploratory holes BH01 and BH02 at 7.20m and

7.60mbgl respectively. Both holes were extended by chiselling to a maximum depth of 8.45m with an average rate of penetration of 0.40m/hr.

Two SPT's were completed within the Siltstone both of which were recorded as refusals with 15mm of penetration for 50 blows.

6.7 Groundwater

Groundwater was encountered within all the exploratory holes at depths of between 0.70m and 2.00mbgl, This is anticipated to be a shallow perched water table from surface water infiltration resting on the underlying impermeable Glacial Till.

6.8 DCP Testing

Dynamic Cone Penetrometer (DCP) testing was carried out across the site to determine CBR values for pavement design. The results are summarised in **Table 6.2** below.

Table 6.2: DCP Results

Test No	Depth (m)	CBR %
DCP 1	0.00 – 0.25	0
	0.25 – 0.94	10
DCP 2	0.06 – 0.41	7
	0.41 – 0.96	69
DCPWS01	0.00 – 0.28	11
	0.28 – 0.40	29
	0.40 – 0.96	55
DCPWS02	0.00 – 0.43	18
	0.43 – 0.62	10
	0.62 – 0.95	29
DCPWS03	0.00 – 0.29	10
	0.29 – 0.43	23
	0.43 – 0.93	38
DCPWS05	0.00 – 0.46	8
	0.46 – 0.73	7
	0.73 – 0.91	16
DCPBH01	0.13 – 0.45	18
	0.45 – 0.81	8
	0.81 – 0.95	15
DCPBH02	0.00 – 0.47	8
	0.47 – 0.81	11
	0.81 – 0.91	20

Several elevated results were recorded during testing however these are most likely as a result of the coarse-grained nature of some of the deposits and as such, should be treated with caution. Testing was

not possible at WS06 and 08 due to the presence dense to very dense material at shallow depth or in the case of WS04 and 07 the presence of cobble sized material within the made ground strata.

7. CHEMICAL TESTING

Representative samples were taken from the made ground, with the sample depths presented in **Table 7.1** below.

Table 7.1: Chemical Test Samples

TP No	Depth (m)	Strata
WS01	0.30	Topsoil
WS05	0.30	Topsoil
WS08	1.50	Made Ground

The results of the soil analyses are presented below, where they have been compared to suitable generic assessment criteria (GACs), in order to allow a generic quantitative risk assessment (GQRA) to be carried out for the site and the proposed development.

The Category 4 Screening Levels (C4SLs) published by DEFRA (2014) have been adopted in the first instance, which have been published for six substances to date. Where a C4SL is unavailable, the "Suitable 4 Use Levels" (S4ULs) published by LQM/CIEH (2015) have been adopted.

These criteria have been derived using the CLEA model for a range of standard end-use scenarios and a range of soil organic matter (SOM) contents. It should be noted that the C4SL values are derived on the basis of a "low level of toxicological concern", while the S4UL values are based on a "tolerable" or "minimal" level of risk. As such, the S4ULs describe a lower level of risk than the C4SLs and are equivalent to the former Soil Guideline Values (SGVs, published by the Environment Agency) and the previous editions of the LQM/CIEH GAC values.

A "Public Open Space (park)." end-use has been adopted for this analysis, based on a conservative organic content of 2.5%.

Note: the S4UL values presented below are Copyright Land Quality Management Limited, reproduced with permission; Publication Number S4UL3668. All rights reserved.

	WS01	WS05	WS08				
Metals & Non-Metals	0.30	0.30	1.50	Count	Adopted Guideline (mg/kg)	Source	Exceedances
Arsenic	10	19.00	3.8	3	170	C4SL	0
Boron, Water Soluble	0.4	0.30	0.6	3	46000	S4UL	0
Cadmium	0.2	0.30	0.5	3	880	C4SL	0
Chromium III	16	21.00	9.5	3	33000	S4UL	0
Chromium, Hexavalent	< 1.0	< 1.0	< 1.0	3	250	C4SL	0
Copper	27	49.00	30	3	44000	S4UL	0
Lead	68	120.00	140	3	1300	C4SL	0
Mercury	0.17	0.29	< 0.05	3	30	S4UL	0
Nickel	18	23.00	32	3	800	S4UL	0
Phenol - Monohydric	0.6	0.70	1.9	3	440	S4UL	0
Selenium	0.7	< 0.5	0.5	3	1800	S4UL	0
Zinc	47	95.00	61	3	170000	S4UL	0

No exceedances were recorded against the Public Open Space end use.

	WS01	WS05	WS08				
Petroleum Hydrocarbons	0.3	0.30	1.5	Count	Adopted Guideline (mg/kg)	Source	Exceedances
Aliphatic C5-C6	< 0.01	< 0.01	< 0.01	3	95000	S4UL	0
Aliphatic C6-C8	< 0.01	< 0.01	< 0.01	3	150000	S4UL	0
Aliphatic C8-C10	< 0.01	< 0.01	< 0.01	3	14000	S4UL	0
Aliphatic C10-C12	< 1.5	< 1.5	19	3	21000	S4UL	0
Aliphatic C12-C16	< 1.2	< 1.2	44	3	25000	S4UL	0
Aliphatic C16-C21	< 1.5	< 1.5	62	3	450000	S4UL	0
Aliphatic C21-C35	< 3.4	< 3.4	220	3	450000	S4UL	0
Aliphatic C35-C40	< 3.4	< 3.4	67	3	76000	S4UL	0
Aromatic C5-C7	< 0.01	< 0.01	< 0.01	3	87000	S4UL	0
Aromatic C7-C8	< 0.01	< 0.01	< 0.01	3	7200	S4UL	0
Aromatic C8-C10	< 0.01	< 0.01	< 0.01	3	9200	S4UL	0
Aromatic C10-C12	< 0.9	< 0.9	10	3	10000	S4UL	0
Aromatic C12-C16	< 0.5	< 0.5	150	3	7600	S4UL	0
Aromatic C16-C21	< 0.6	< 0.6	430	3	7800	S4UL	0
Aromatic C21-C35	< 1.4	< 1.4	650	3	7800	S4UL	0

No exceedances were recorded against the Public Open Space end use.

	WS01	WS05	WS08				
Polyaromatic Hydrocarbons (PAH)	0.3	0.30	1.5	Count	Adopted Guideline (mg/kg)	Source	Exceedances
Acenaphthene	0.04	< 0.03	4.7	3	29000	S4UL	0
Acenaphthylene	< 0.03	< 0.03	0.76	3	29000	S4UL	0
Anthracene	0.05	0.06	6.1	3	150000	S4UL	0
Benzo(a)anthracene	0.15	0.31	4.7	3	49	S4UL	0
Benzo(a)pyrene	0.12	0.30	12	3	21	C4SL	0
Benzo(b)fluoranthene	0.18	0.41	4	3	13	S4UL	0
Benzo(g,h,i)perylene	0.06	0.17	4.3	3	1400	S4UL	0
Benzo(k)fluoranthene	0.07	0.17	1.8	3	370	S4UL	0
Chrysene	0.19	0.37	4.1	3	93	S4UL	0
Dibenzo(a,h)anthracene	< 0.03	0.04	0.86	3	1.1	S4UL	0
Fluoranthene	0.41	0.63	13	3	6300	S4UL	0
Fluorene	< 0.03	< 0.03	3.6	3	20000	S4UL	0
Indeno(1,2,3-c,d)pyrene	0.06	0.15	3.6	3	150	S4UL	0
Naphthalene	< 0.03	< 0.03	2	3	1200	S4UL	0
Phenanthrene	0.28	0.27	13	3	6200	S4UL	0
Pyrene	0.39	0.62	12	3	15000	S4UL	0

No exceedances were recorded against the Public Open Space end use.

	WS01	WS05	WS08				
Other Contaminants / Testing	0.3	0.30	1.5	Count	Adopted Guideline (mg/kg)	Source	Exceedances
Organic matter	7	4.40	6.3	3	-	-	-
pH	7	6.10	8.7	3	-	-	-
Sulphide	< 10	< 10	12	3	-	-	-
Cyanide, Total	0.5	0.60	0.2	3	-	-	-
Sulphur (free)	< 0.75	< 0.75	< 0.75	3	-	-	-
Sulphate Aqueous Extract as SO ₄	140	21.00	56	3	-	-	-

None of the above values cause any concern.

8. INITIAL CONCEPTUAL GROUND MODEL

8.1 General

According to the Contaminated Land Regulations, to determine whether there is a significant possibility of significant harm, the following should be considered:

“The nature and degree of harm, the susceptibility of the receptors and the timescale within which the harm might occur”.

Current good practice therefore requires that the findings from the desk study or site investigation be evaluated for contamination on a site-specific basis using a risk-based approach. Risk assessment involves identification of the hazards and evaluation of the risks associated with these hazards. Risk assessment requires an evaluation of a conceptual “source – pathway – receptor” linkage model and can be qualitative or quantitative.

The basis of an environmental risk assessment involves identifying a ‘source’ of contamination, a ‘pathway’ along which the contamination may migrate and a ‘receptor’ at risk from the contamination.

Current legislation defines the various elements of the pollution linkage as:

- A contaminant ‘source’ is a substance, which is in, or under the ground, and which has the potential to cause harm or to cause pollution of controlled waters.
- A ‘pathway’ is one or more routes through which a receptor is being exposed to, or affected by, a contaminant, or could be so affected.
- A ‘receptor’ is either a living organism, an ecological system, a piece of land or property, or controlled water.

A pollutant linkage indicates that all three elements have been identified. The site can only be defined as ‘Contaminated Land’ if a pollutant linkage exists, and the contamination meets the criteria above.

On site

The desk study has revealed the sites historical uses have been as open fields and a school, with a pond historically located on the southwestern boundary of the site. The pond was backfilled before 1956 and is now overlain by the current hard standing playing area of the school. Laboratory testing of the made ground and topsoil has not indicated the presence of any contamination although visual evidence was noted on made ground recovered from laboratory testing confirmed this is not sufficiently elevated to present a risk.

Off site

The desk study has revealed that there were very few potential contaminative land uses close to the site, none of which are considered likely to have affected the site.

Table 8.1: Source, Pathway, Receptor

Potential Contamination Sources	Potential Contaminants of Concern	Potential Pathways	Receptor Group
Localised Made Ground (associated with school construction)	Heavy Metals PAH Asbestos Gas Generating materials	Inhalation/ingestion of contaminated dust Dermal contact Leaching of contaminated materials	Construction Workers Surface and groundwater Building materials and buried services
Backfilled pond	Hydrocarbons	Lateral Migration/Infiltration of gas/water	Site end users

8.2 Pathways

In relation to any on site contamination reaching potential site users, the following pathways are generally considered for this type of development:

- Ingestion and skin contact with soils on site,
- Inhalation of ground gas,
- Inhalation of contaminated dust,
- Leaching of contaminated materials that may affect controlled waters,
- Direct contact with contaminated material during construction,
- Infiltration and accumulation of ground gas.

8.3 Receptors

The potential impact of a hazard must be assessed with regard to the following target groups:

- Future site users,
- Construction workers,
- Surface and groundwater, both on and off the site,
- Nearby vegetation,
- Building materials and buried services.

8.4 Future Site Users Risk Assessment

The desk study identified an historic pond on site, backfilled before the construction of the school pre-1956, however testing of the back fill material and the wider made ground failed to identify any contaminants of concern. In addition the backfill material is currently isolated from receptors via hardstanding and does not lie within the proposed development area. Consequently it is considered the risk posed by the backfilled pond remains low.

Whilst laboratory testing failed to identify any contamination, in line with current good practice, it is recommended that a watching brief be carried on all excavations. Should any contamination be encountered, it should be excavated, stored safely on site, tested, and disposed of at a suitably licensed landfill facility.

8.5 Controlled Waters Risk Assessment

When considering the risk to controlled waters both surface waters and underlying aquifers must be considered.

In this case, due to the apparent absence of contamination, the risk to controlled waters is considered to be negligible.

8.6 Construction Workers

Based on the desk-based assessment, the risk to construction workers is considered to be low; and can be catered for by appropriate PPE and washing facilities in accordance with current good practice.

8.7 Ground Gases

The desk study failed to reveal any past or current landfills within 1km of the site, although the presence of an infilled pond on site was confirmed by WS08. The exploratory hole logs did not encounter any putrescible material and the age of the backfill means any generation potential of unidentified organic fill materials is now likely to be minimal consequently the risk of ground gas remains low.

The site lies within a low probability radon area; therefore, no radon protective measures are necessary in the construction of new dwellings or extensions.

8.8 Building Materials

The desk study has not revealed any potential contamination that could adversely affect building materials or services.

9. GEOTECHNICAL RECOMMENDATIONS

9.1 Excavations and Site Preparation

Existing surfacing comprises a combination of asphalt hardstanding's and landscaped play areas. The hardstanding's will need to be broken out and removed to a suitably licensed facility for recycling or disposal. The topsoil will need to be stripped and, given the limited quantities along with the absence of contamination it should be feasible to reuse this material onsite for localised landscaping. In addition, there are several immature trees that will need to be felled and their roots grubbed out. Any resulting excavations should be backfilled with suitable granular material and compacted in accordance with an approved earthworks specification, such as **Reference 4**.

Excavations will then be in the fluvioglacial deposits and will be possible using conventional earthmoving equipment.

Excavations are likely to be stable in the short term. However, excavations deeper than 1.20m that are to be entered will need to be shored or battered back for safety reasons. Excavation sides should be designed, constructed and supported in accordance with the recommendations given in CIRIA Report No. 97, **Reference 5**.

Groundwater was encountered within the fluvioglacial materials at between 1.00 and 2.00m below ground, consequently excavations below this level are likely to experience water ingress. It is anticipated this is a perched water table lying above the impermeable clay and that flows should be limited, and controllable via suitably designed pumping from sumps.

9.2 Foundations and Floor Slabs

The site investigation confirmed the ground conditions to comprise a limited thickness topsoil/made ground overlying fluvioglacial deposits.

The FFL is not known, however it is anticipated to lie at or around existing grade meaning formation strata is likely to comprise loose sands and gravels. SPT N-values within this material range between 4 and 10 suggesting allowable bearing pressure in the region of 50-100kN/m² assuming a worst case of 50kN/m² the use of conventional spread foundations is likely to prove unfeasible. The most effective solution would therefore be the use of a reinforced raft foundation with localised thickenings, design to impart a bearing pressure no greater than 50kN/m² at any point.

A minimum foundation depth of 0.75m below final external ground level is recommended.

The use of a raft foundation means floor slabs will be incorporated into the foundation solution.

9.3 Drainage

Ground conditions throughout the site comprised medium dense, sands and gravels overlying low permeability glacial till. **Reference 6** recommends a permeability of no greater than 1x10⁻⁵m/s for sand and gravel mixtures therefore shallow soakaways constructed wholly within the fluvioglacial deposits should be feasible for surface water drainage.

9.4 Reuse of Materials

Site constraints mean there is limited scope for materials reuse on site however should this be possible, laboratory testing indicates that the topsoil should be suitable for reuse. The underlying fluvioglacial materials should be suitable for both structural and general fill.

9.5 Roads and Hardstanding's

CBR testing using a DCP has been carried out across the site with the results shown in **Appendix E**.

Examination of the test results indicates significant variation in CBR value however the upper 300mm can be discounted as this is generally within the topsoil scheduled for removal. The higher values recorded are likely as a result of encountering coarse grained material within the test horizon.

Excluding these outliers, testing indicates a minimum value of 7%, within the upper 500mm of surface material. Consequently, it should be feasible to adopt a CBR value of 5% for pavements and hardstanding's.

However, formations should be proof rolled and any soft/loose areas identified excavated typically an additional 300mm and replaced with suitable well compacted granular material.

9.6 Protection of Buried Concrete

The laboratory test results have indicated that chemical attack of buried concrete will not be an issue. Buried concrete can therefore be designed in accordance with the following classes, **Reference 7**.

- AC – 1.
- DS – 1.

9.7 Ground Gas

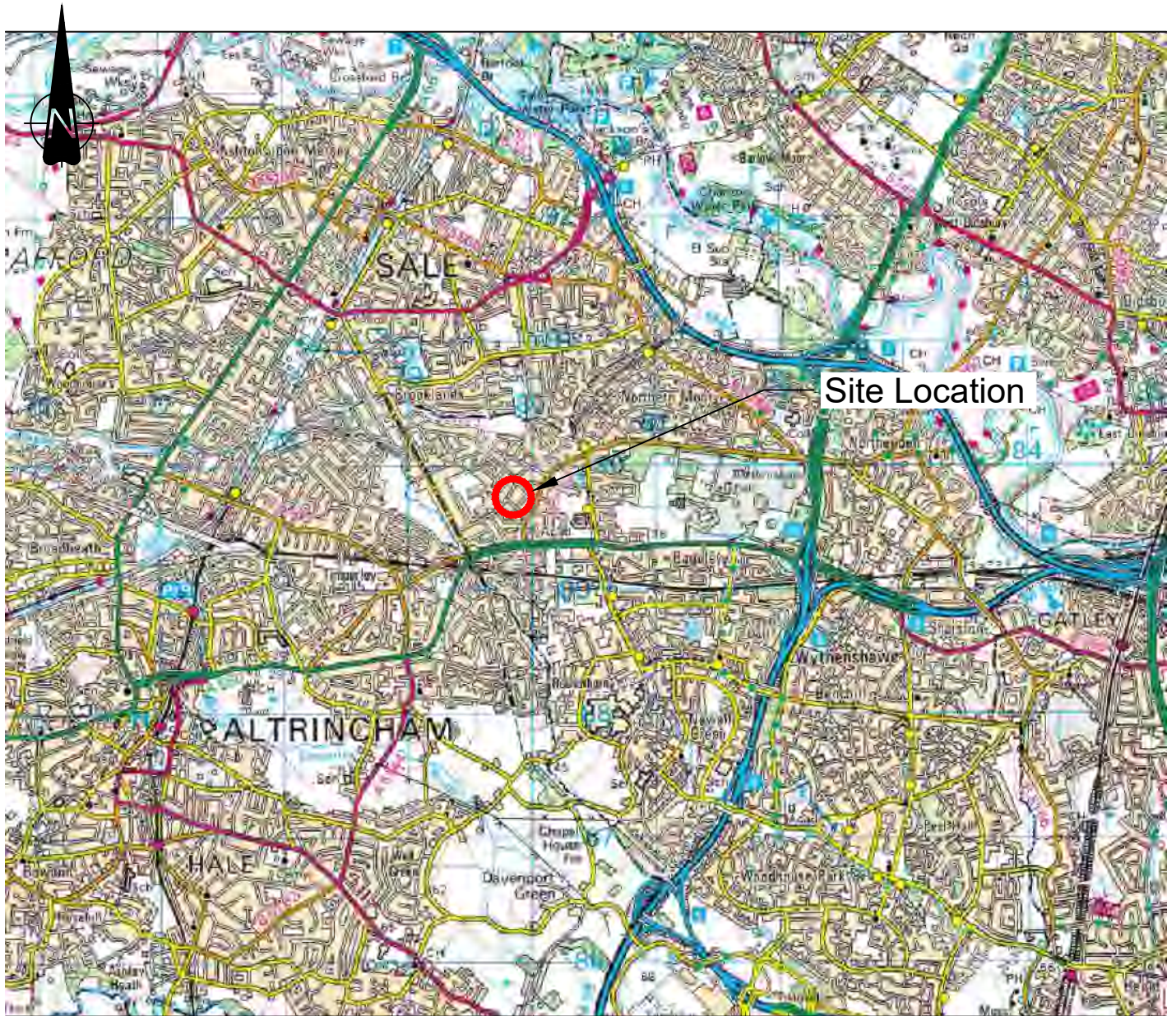
Whilst the desk study initially identified a potential source of landfill gas in the backfilled pond the ground investigation did not identify any materials with the potential for gas generation, therefore, the risk to the site from ground gas is considered to be negligible.

The site lies within a low probability radon area; therefore, no radon protective measures are necessary in the construction of new buildings.

10. REFERENCES

1. *Memoirs of the Geological Survey of Great Britain- The geology of the country around Stockport and Knutsford, 1963.*
2. *BS 5930:2015, Code of Practice for Site Investigation,*
3. *BS 1377:1991, British Standard Methods of Tests for Soils for Civil engineering Purposes,*
4. *Manual of Contract Documents for Highway Works, Volume 1, Specification for Highway Works - Series 600, Department of Transport, 2016,*
5. *CIRIA C97 Trenching practice, 2nd Edition. 1983*
6. *CIRIA C515 Groundwater control - design and practice, CIRIA. 2000,*
7. *BRE Special Digest 2, Concrete in aggressive ground. 2nd Edition.*

FIGURES: Site Information and History



OS LICENSE No. 100030802

SCALE 1:50,000 @ A4

Figure Title

SITE LOCATION

FIGURE 1



Site Boundary

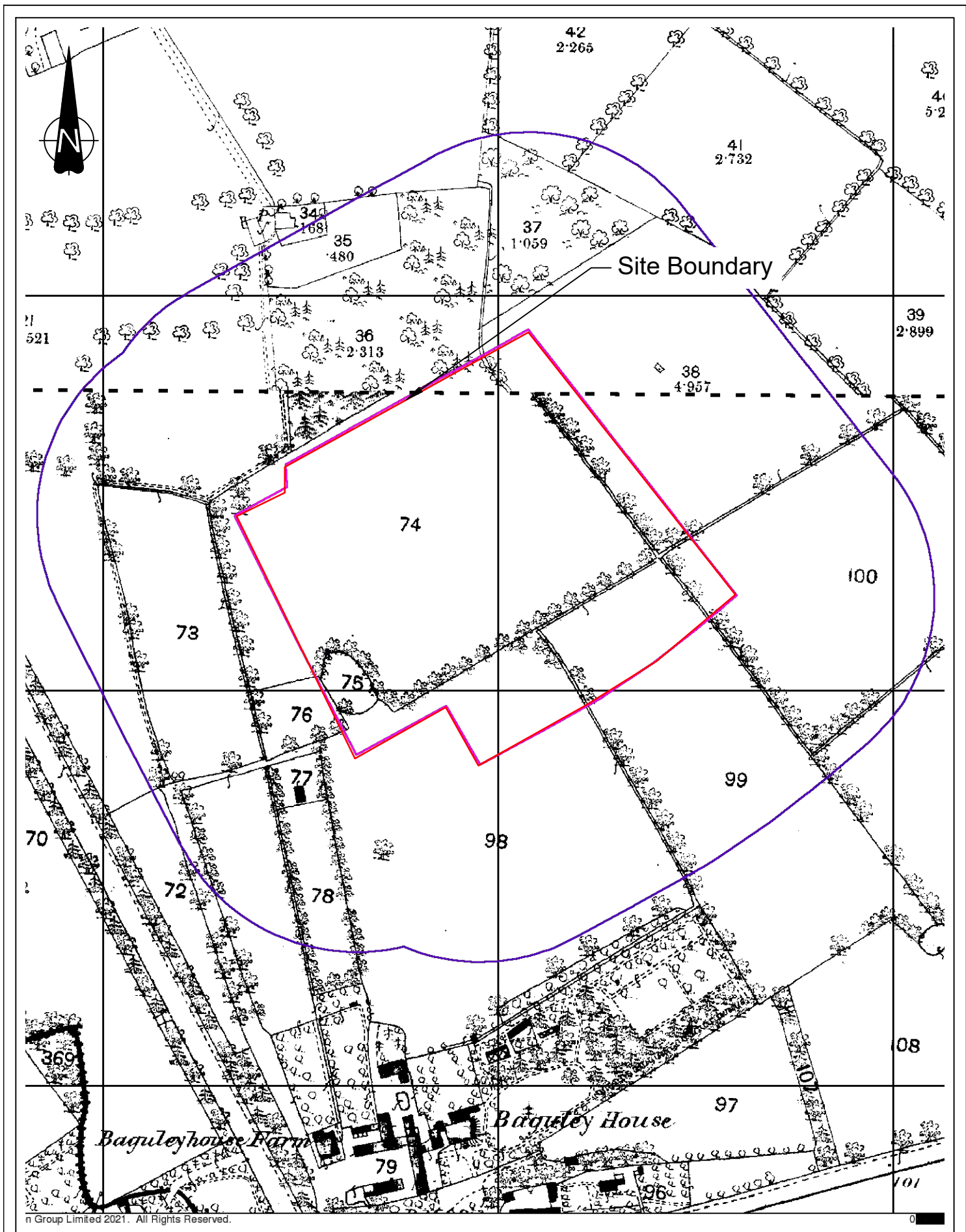
- DCP Locations
- ⊗ BH/WS Locations



SCALE 1:1000 @ A3

Figure Title
Existing Site Layout
and Exploratory Hole
Locations

FIGURE 2

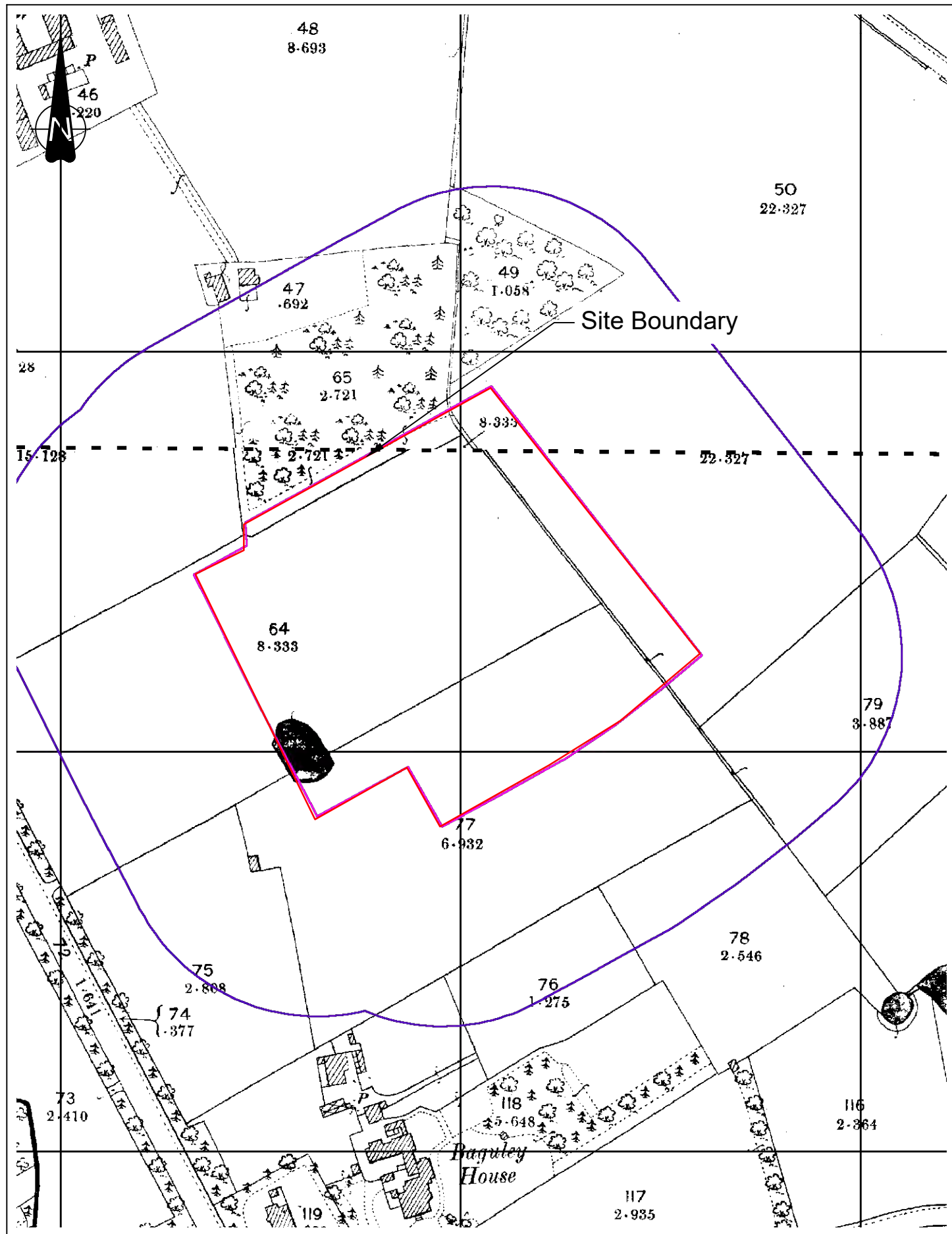


SCALE 1:2500@ A4

Figure Title

HISTORYS
1876 OS PLAN

FIGURE 3a

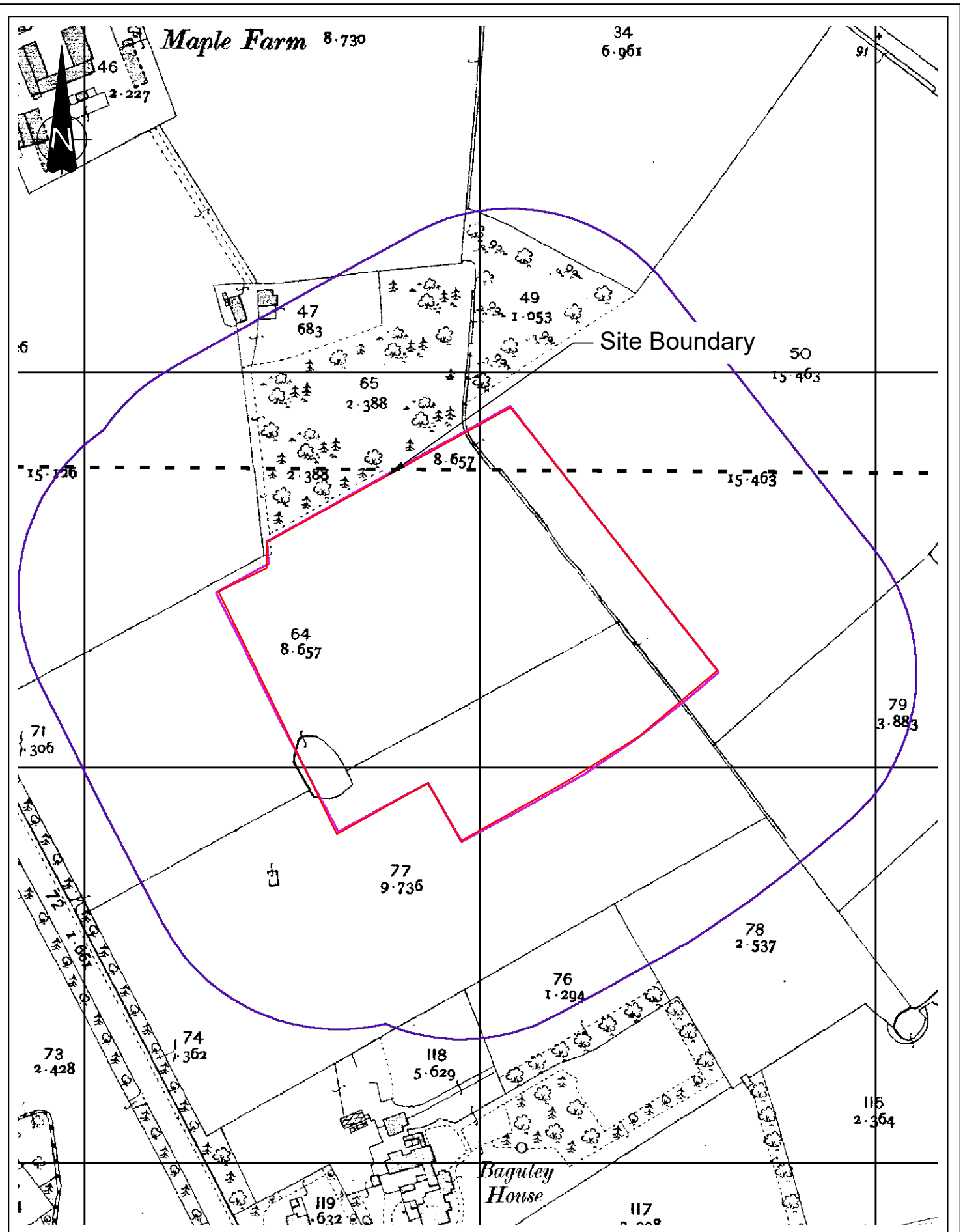


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Figure Title

HISTORYS
1898 OS PLAN

FIGURE 3b

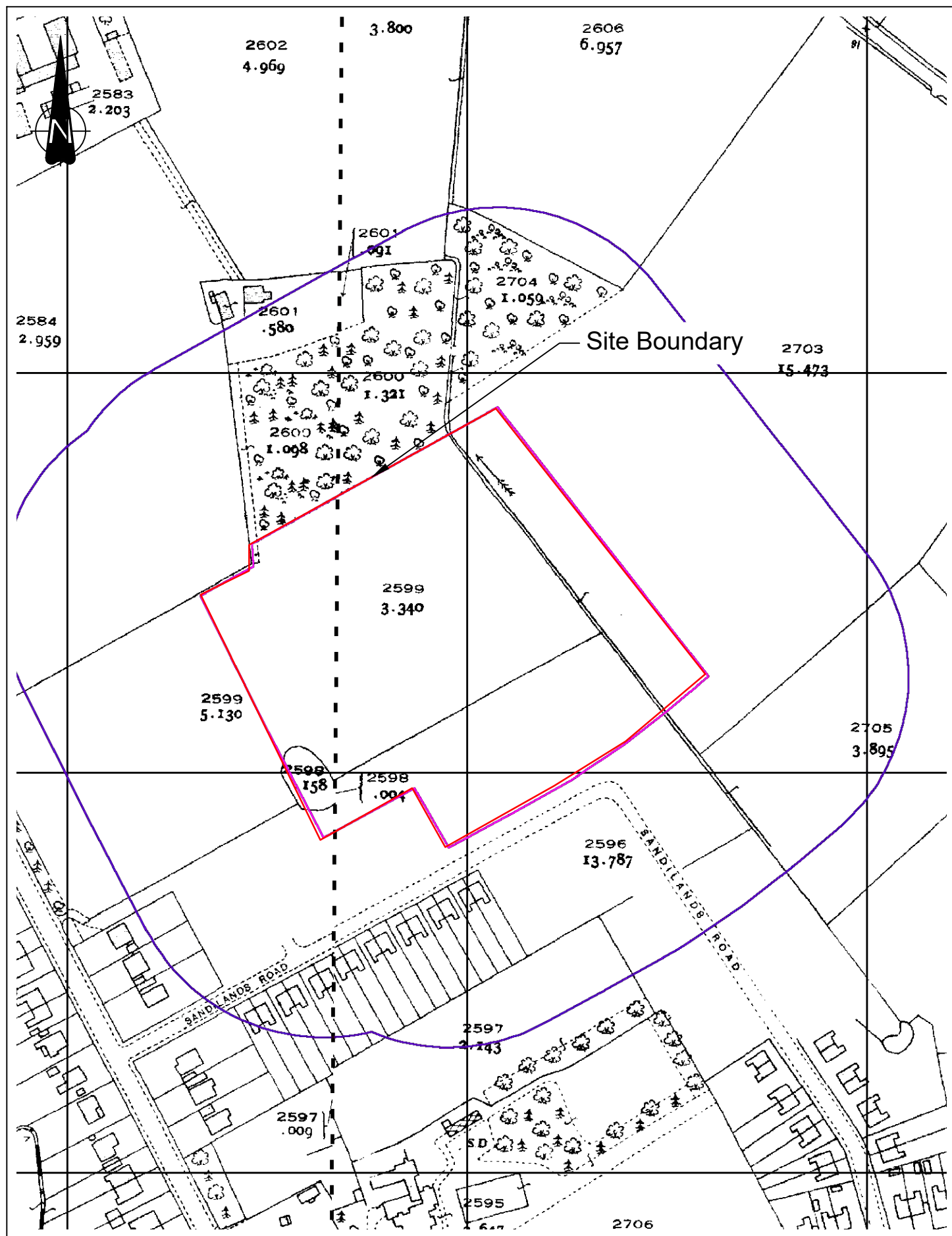


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Figure Title

HISTORYS
1910 OS PLAN

FIGURE 3c

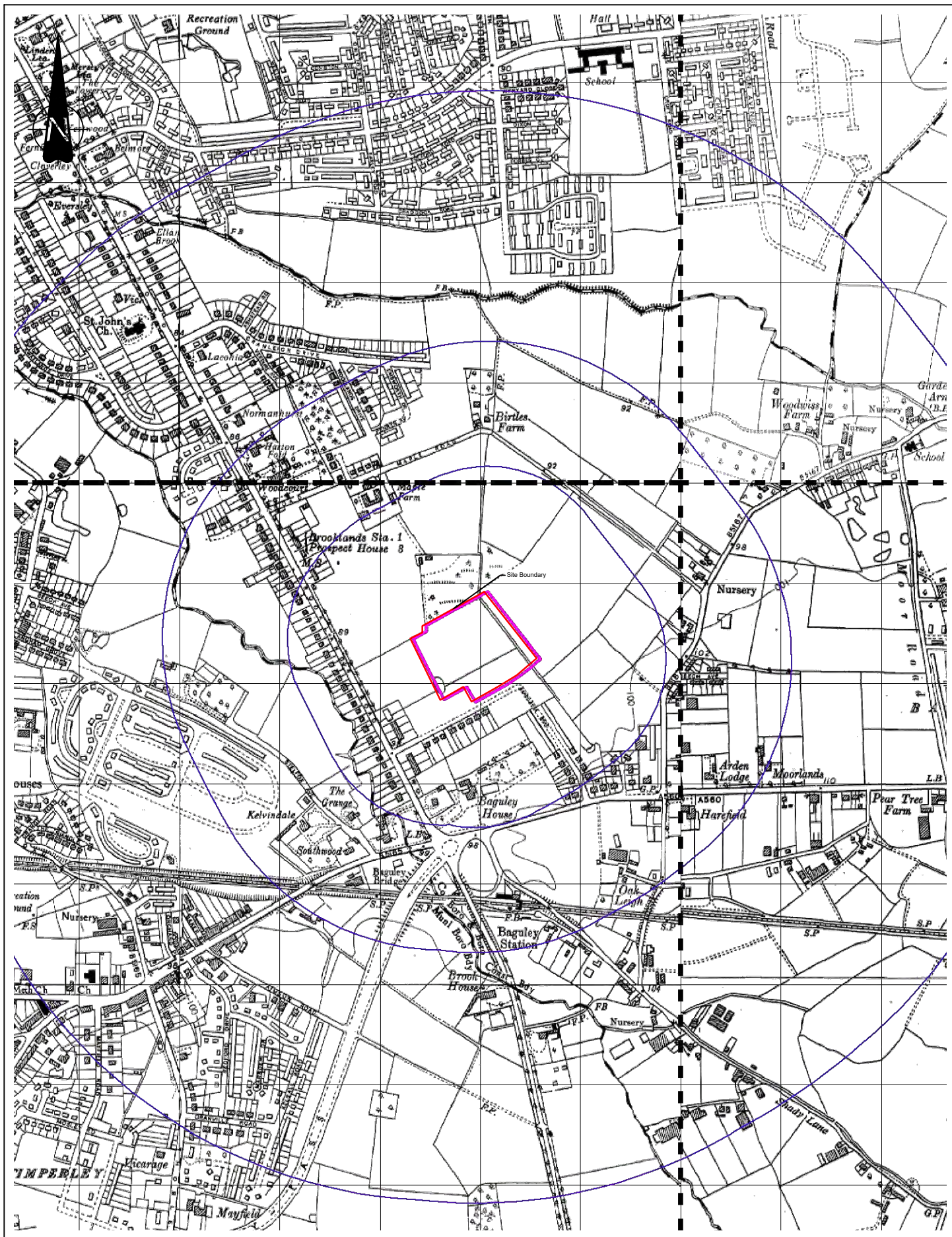


SCALE 1:2500@ A4

Figure Title

HISTORYS
1935 OS PLAN

FIGURE 3d

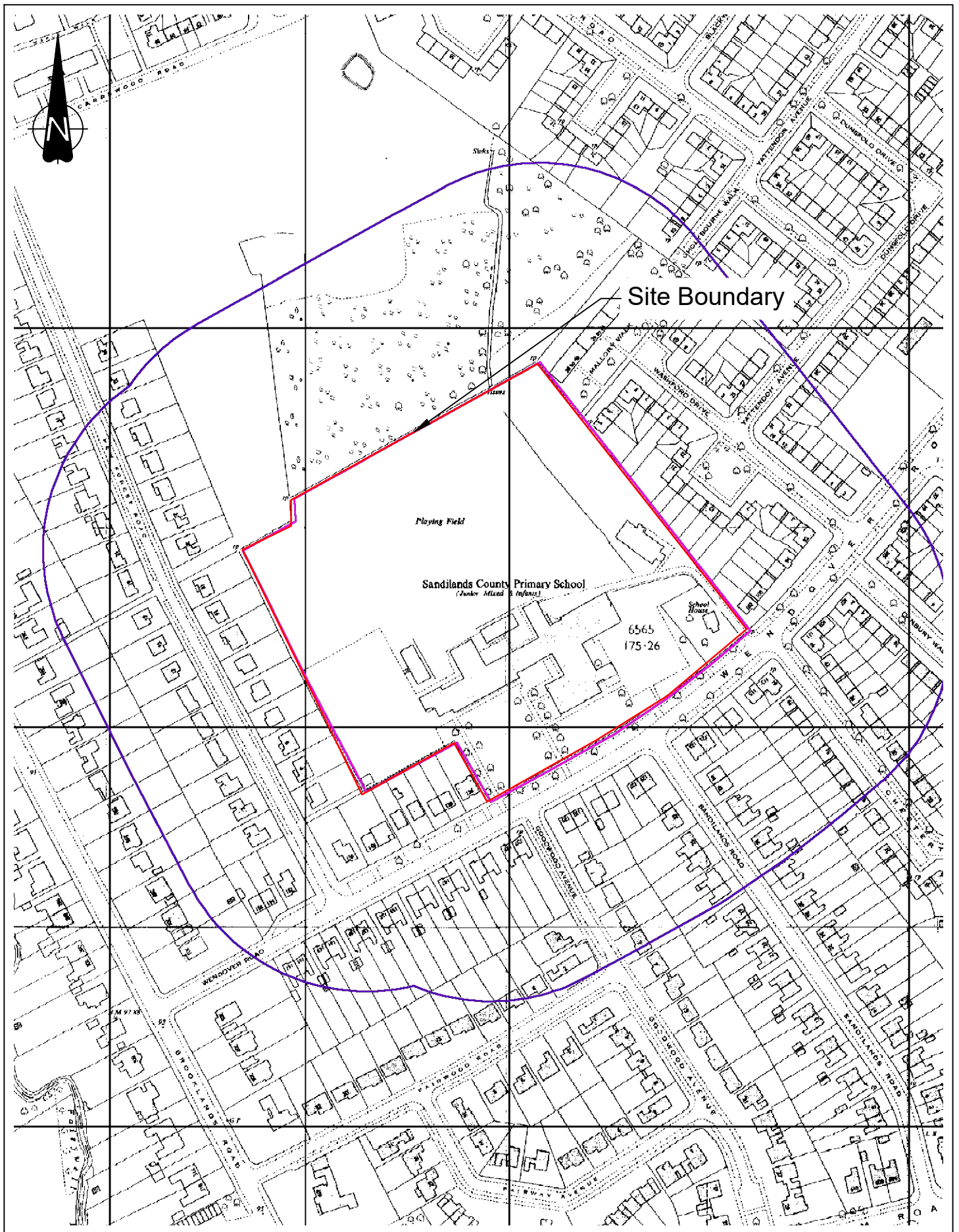


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Figure Title

HISTORYS
1954 OS PLAN

FIGURE 3e

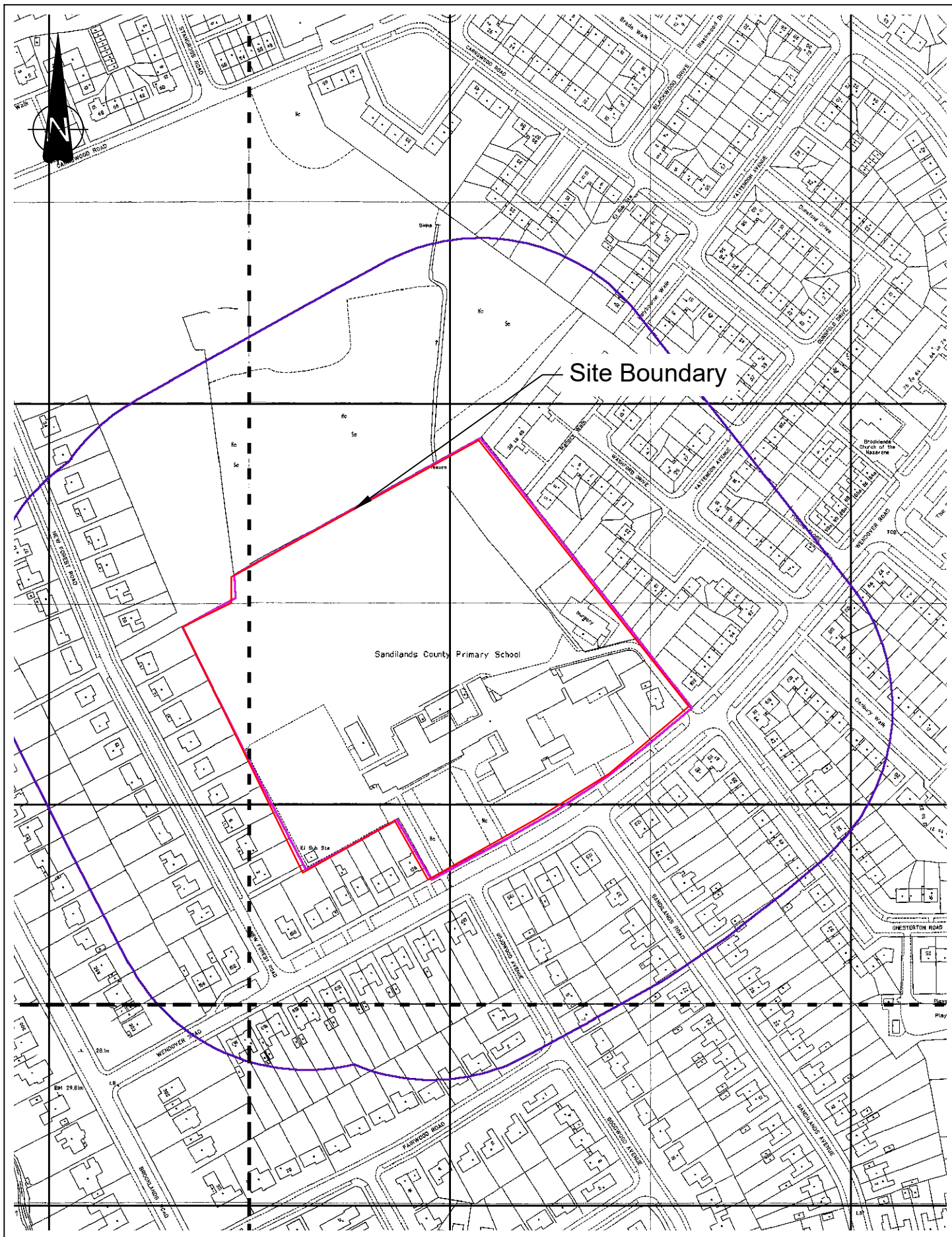


SCALE 1:2500@ A4

Figure Title

HISTORYS
1969 OS PLAN

FIGURE 3g



SCALE 1:2500@ A4

Figure Title

HISTORYS
1992 OS PLAN

FIGURE 3h

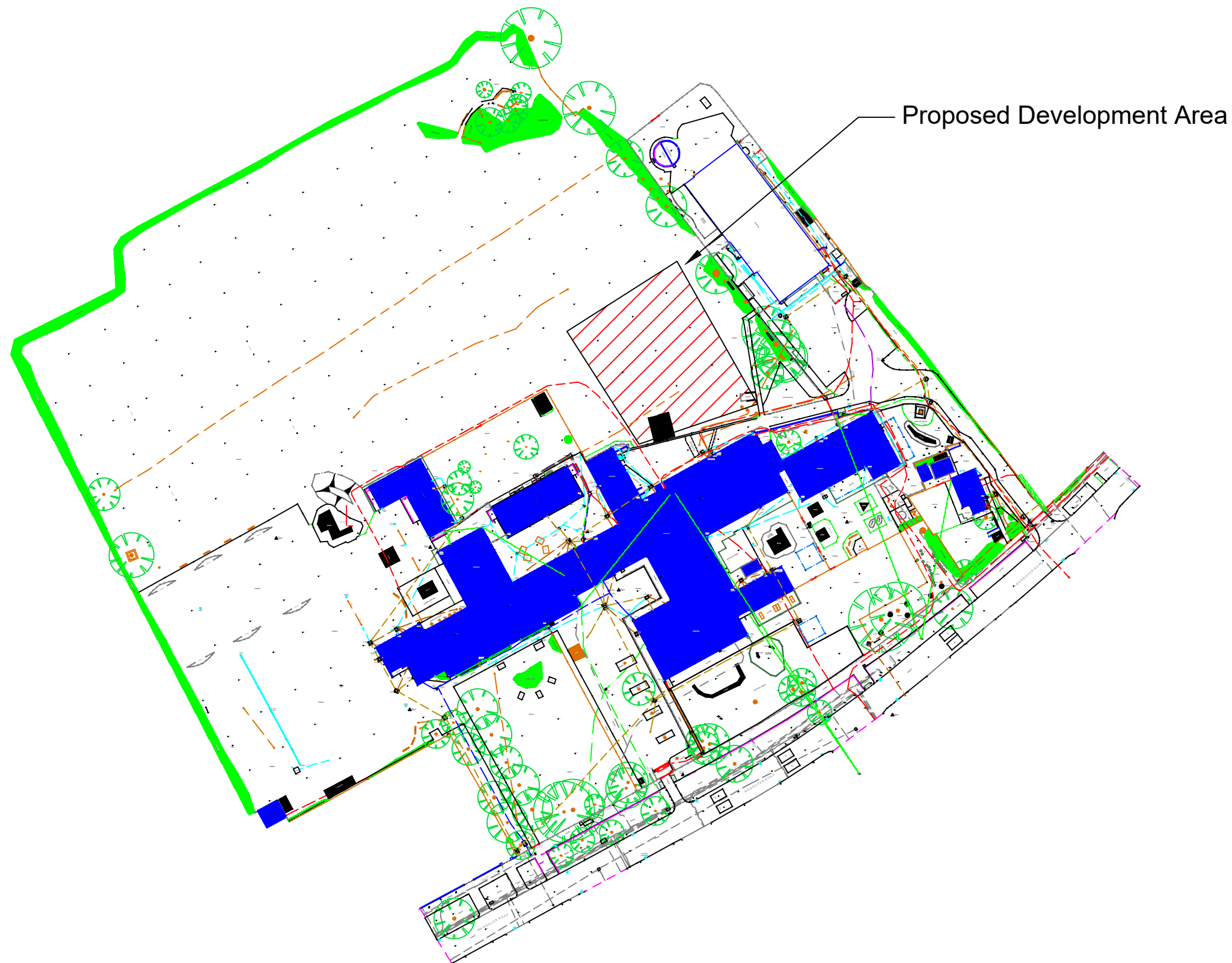


SCALE 1:2500@ A4

Figure Title

HISTORYS
Aerial Photograph 2000

FIGURE 3i



SCALE 1:1000 @ A3

Figure Title
Proposed Development
Area

FIGURE 4

SPT N Value Vs Reduced level

Project ID: SL01-R12

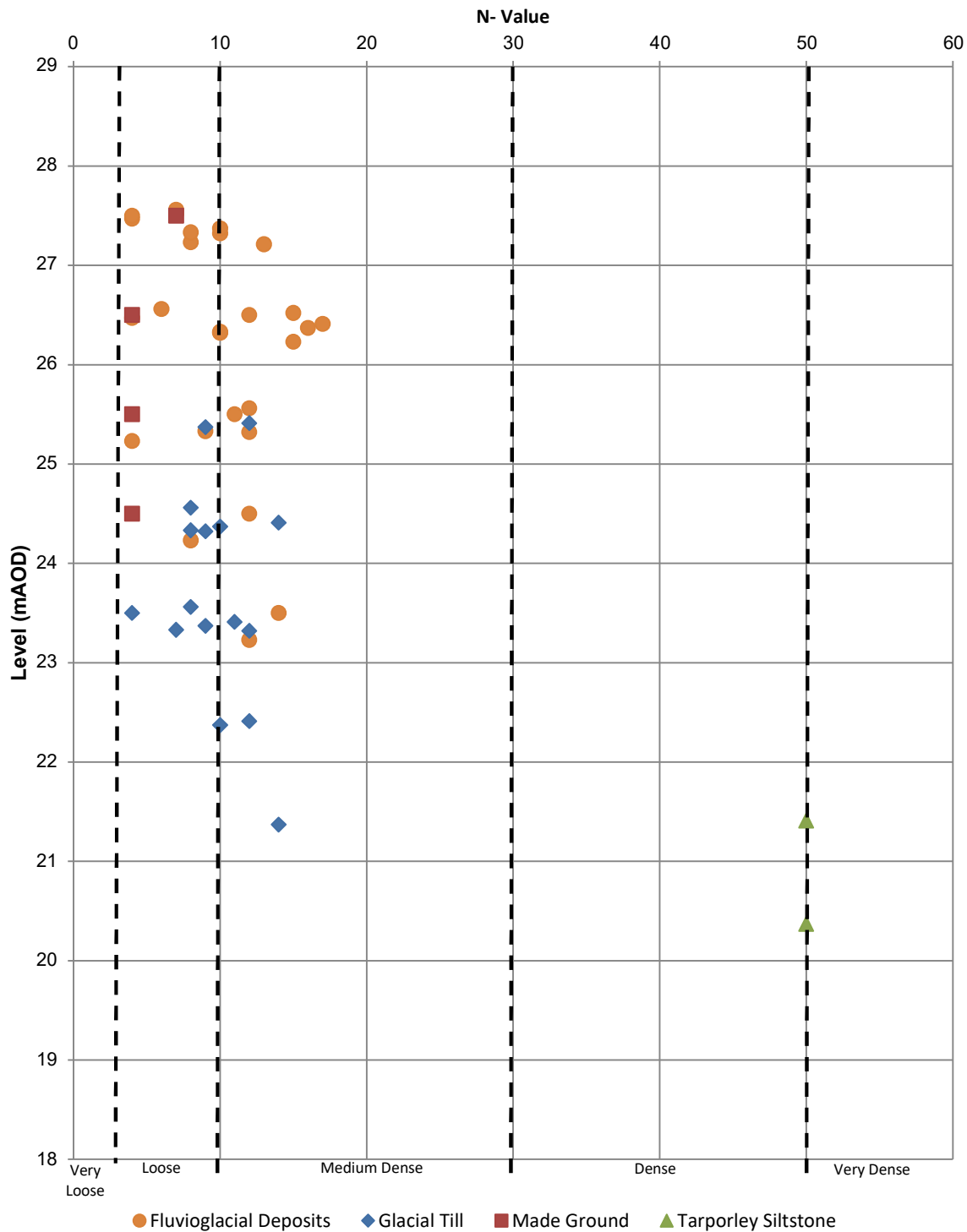
Project Title: **Sandilands CP School, Manchester**

Final Depth: **N/a**

Client: **DfE**

Location: **Stretford, Manchester**

Date Drilled: 13/-14/08/21



Date Reported: 28/09/2021

FIGURE 5

APPENDIX A: Site Photographs



Photograph 1- Showing the front of the existing school buildings.



Photograph 2- Facing south showing the playing fields in the area of the proposed development.



Photograph 3- facing west showing the playground of the school.



Photograph 4- Facing south showing the site entrance.



Photograph 5- Facing east towards the school entrance.



Photograph 6- Showing the middle courtyard.

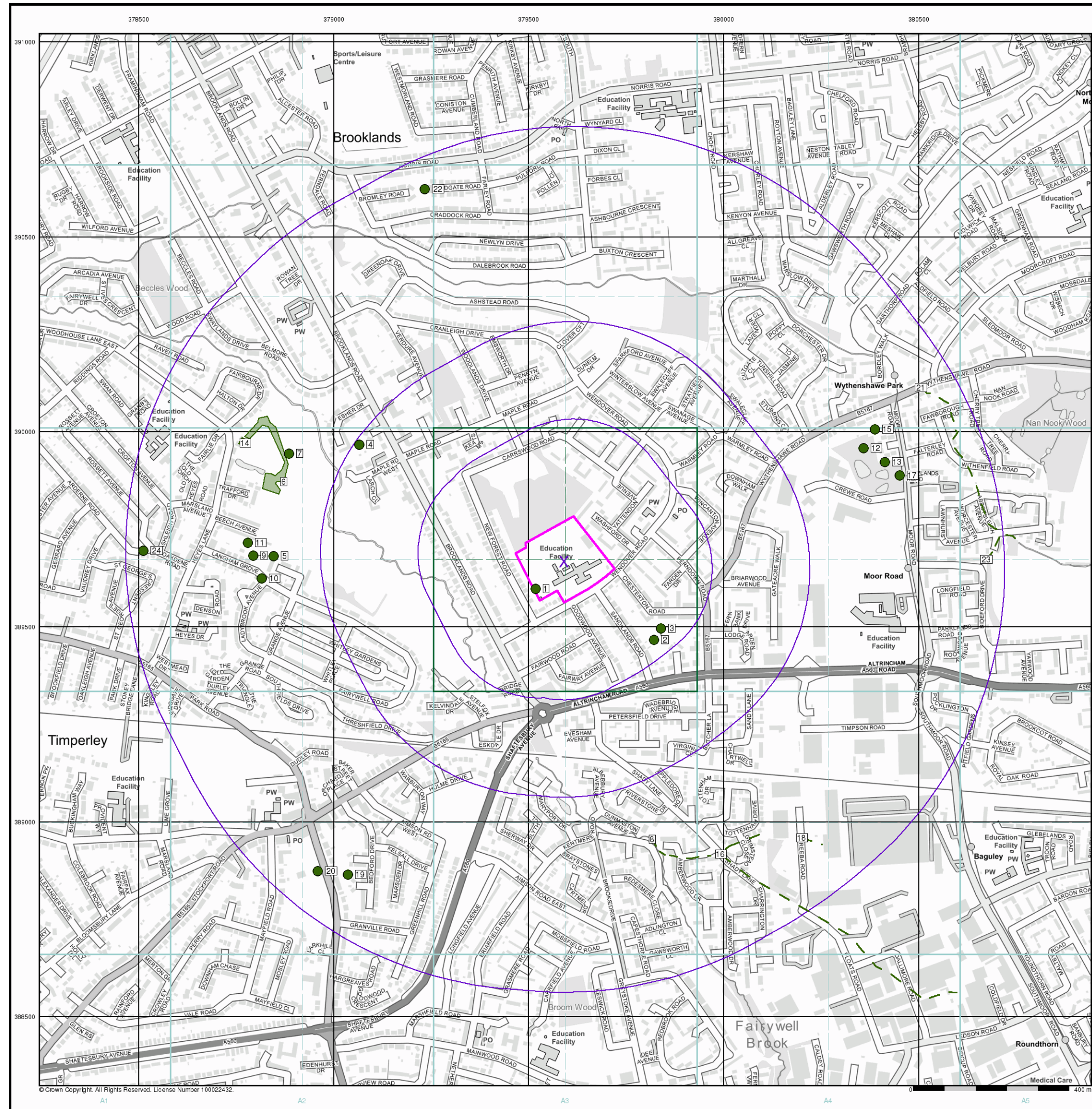


Photograph 7- Facing north showing the playing fields.



Photograph 8- Showing the eastern entrance to the site for access to playing fields.

APPENDIX B: Envirocheck Report



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Historical Land Use Information (1:10,000)

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

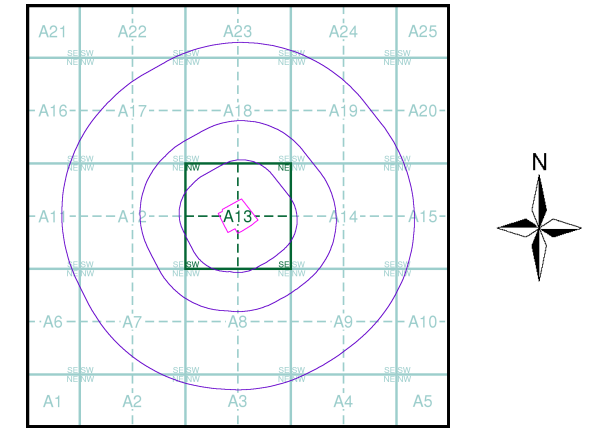
Potentially Contaminative Industrial Uses (Past Land Uses - Mining)

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

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

- Mining Data**
- Potential Mining Area
 - BGS Recorded Mineral Site

Mining and Ground Stability - Slice A



Order Details

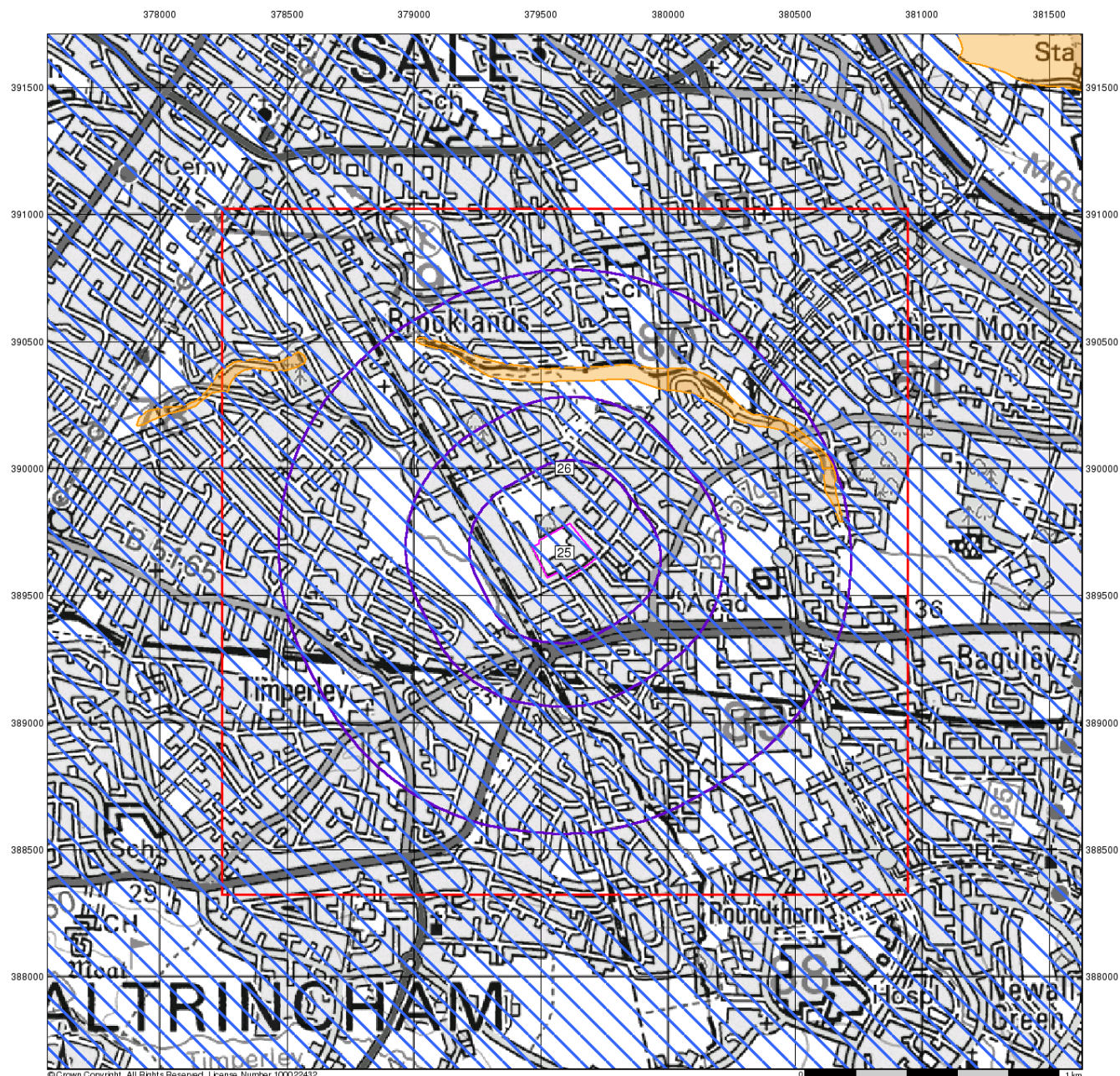
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Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Search Buffer (m): 1000

Site Details

Sandilands Primary School, Wendover Road, MANCHESTER, M23 9JX

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Ground Stability Data (1:50,000)

General

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

Potential for Compressible Ground Stability Hazards

- High
- Moderate
- Low
- Very Low

Potential for Collapsible Ground Stability Hazards

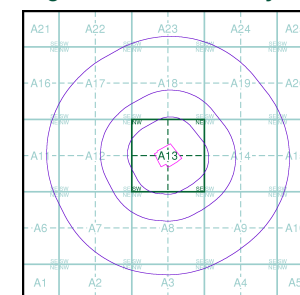
- High
- Moderate
- Low
- Very Low

Brine Pumping and Salt Mining

- Brine Pumping Related Feature
- Salt Mining Related Feature

- Point
- Polygon

Mining and Ground Stability - Slice A



Order Details

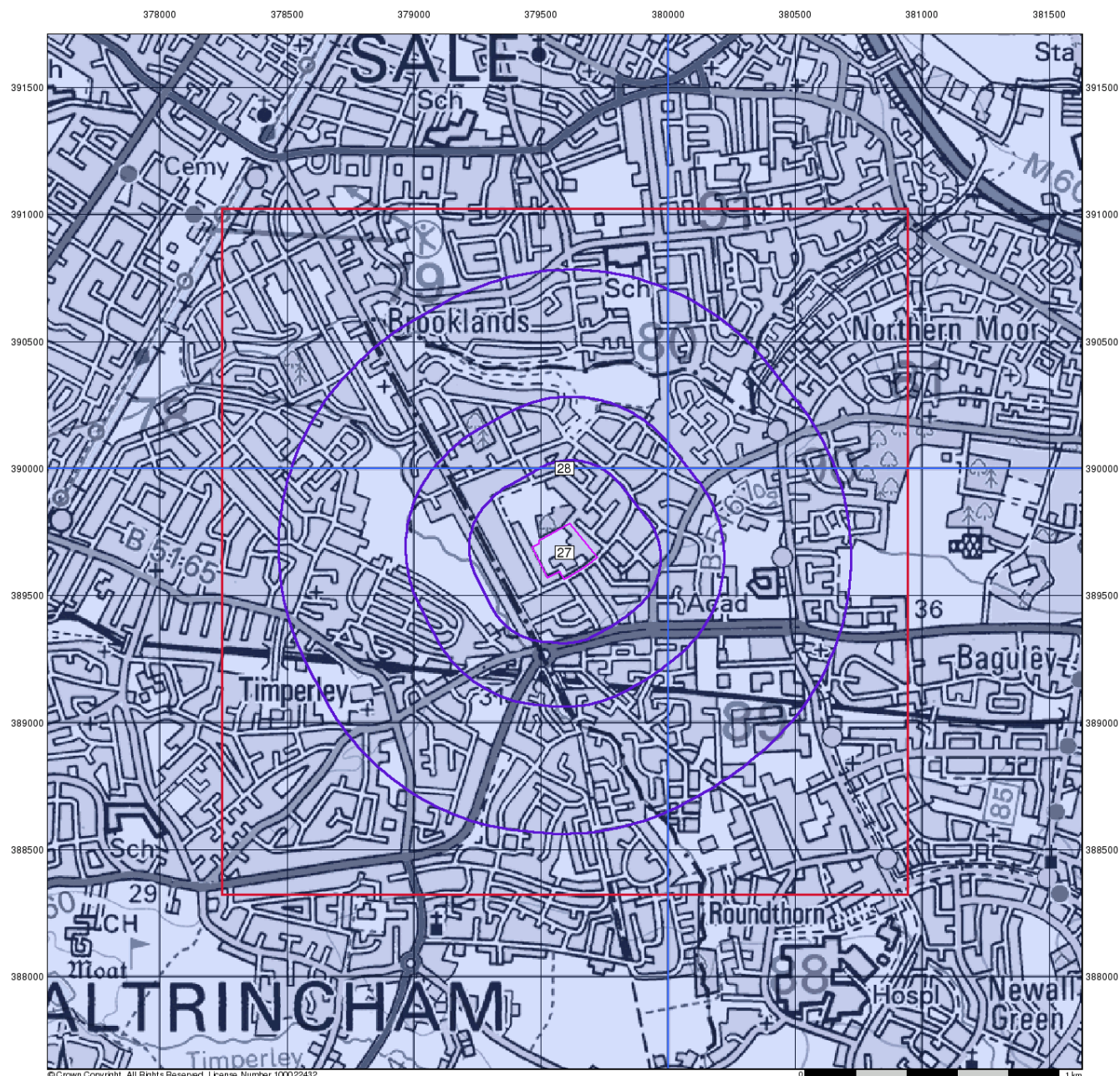
Order Number: 279317373_1_1
 Customer Ref: 2548 TG
 National Grid Reference: 379590, 389670
 Slice: A
 Site Area (Ha): 3.24
 Search Buffer (m): 1000

Site Details

Sandlands Primary School, Wendover Road, MANCHESTER, M23 9JX

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Ground Stability Data (1:50,000)

General

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

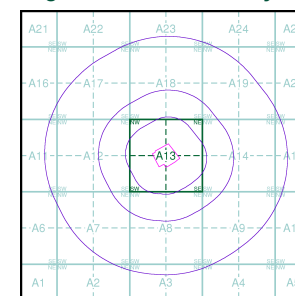
Potential for Landslide Ground Stability Hazards

- High
- Moderate
- Low
- Very Low

Potential for Ground Dissolution Stability Hazards

- High
- Moderate
- Low
- Very Low

Mining and Ground Stability - Slice A



Order Details

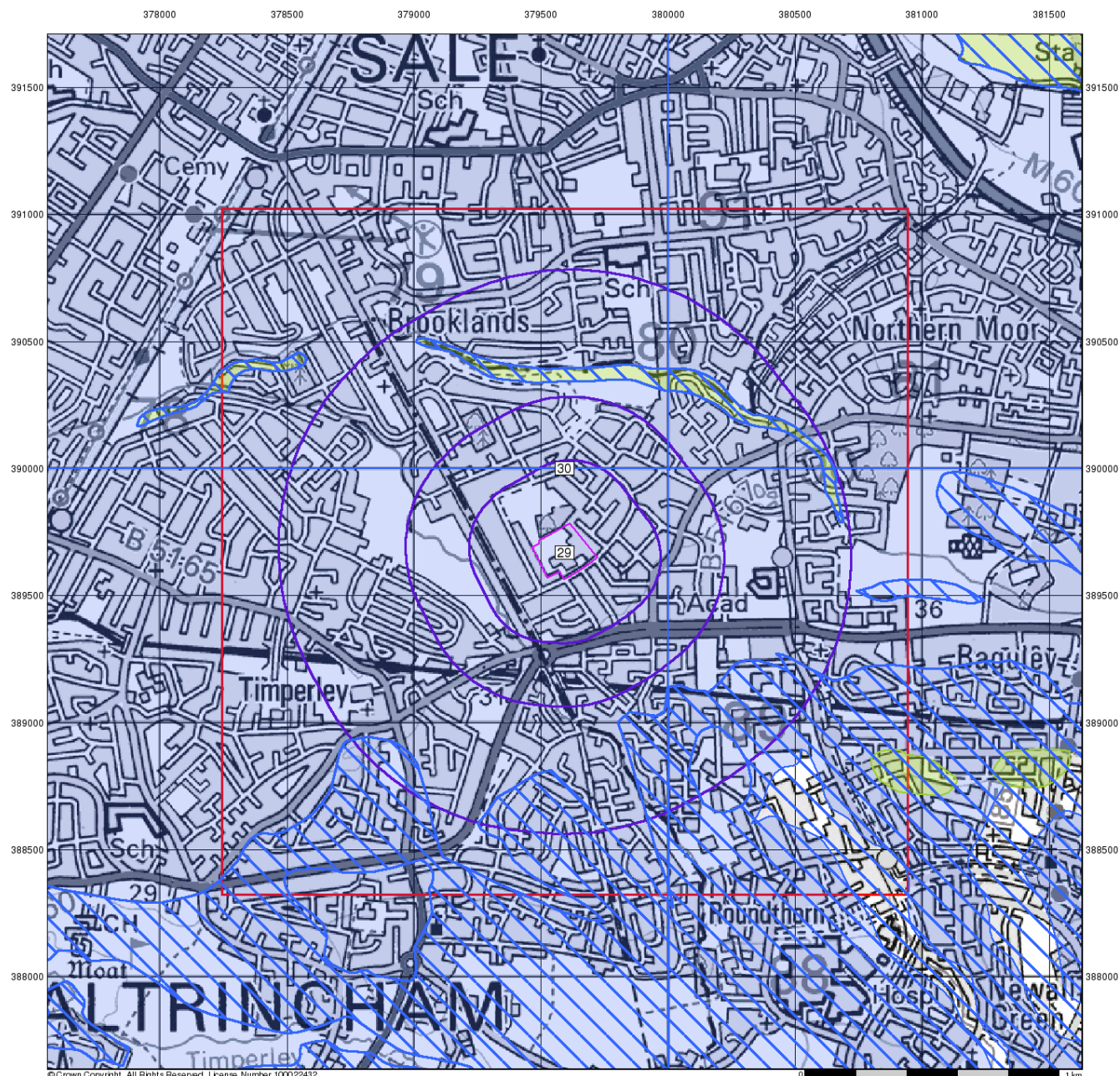
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 Customer Ref: 2548 TG
 National Grid Reference: 379590, 389670
 Slice: A
 Site Area (Ha): 3.24
 Search Buffer (m): 1000

Site Details

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Ground Stability Data (1:50,000)

General

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

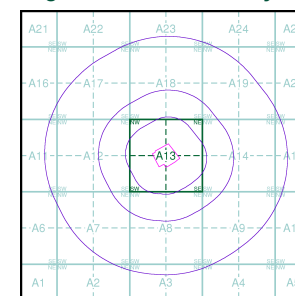
Potential for Running Sand Ground Stability Hazards

- High
- Moderate
- Low
- Very Low

Potential for Shrinking or Swelling Clay Ground Stability Hazards

- ▨ High
- ▨ Moderate
- ▨ Low
- ▨ Very Low

Mining and Ground Stability - Slice A



Order Details

Order Number: 279317373_1_1
 Customer Ref: 2548 TG
 National Grid Reference: 379590, 389670
 Slice: A
 Site Area (Ha): 3.24
 Search Buffer (m): 1000

Site Details

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Envirocheck[®] Report:

Mining and Ground Stability Datasheet

Order Details:

Order Number:

279317373_1_1

Customer Reference:

2548 TG

National Grid Reference:

379590, 389670

Slice:

A

Site Area (Ha):

3.24

Search Buffer (m):

1000

Site Details:

Sandilands Primary School, Wendover Road
MANCHESTER
M23 9JX

Client Details:

1ST HORIZON
The Old Pop Factory
88-90 High Street
Dodworth
Barnsley
S75 3RQ

Report Section and Details	Page Number
Summary	-
The Summary section provides an overview of the data contained within the report, detailing the number of data set features or the existence of a data set in relation to the buffer selected. For ease of reference, the report is broken down into 4 sections of data; Mining and Natural Cavities Data, Historical Land Use Information (1:2,500), Historical Land Use Information (1:10,000) and Ground Stability Data (1:50,000).	
Mining and Natural Cavities Data	-
The Mining and Natural Cavities Data section features data sets related to the existence of mining areas and their potential hazards; and details of naturally formed cavities. Data sets within this section are not plotted, with the exception of BGS Recorded Mineral Sites and Potential Mining Areas which feature on the Historical Land Use Information (1:10,000) map.	
Historical Land Use Information (1:2,500)	-
The Historical Land Use Information (1:2,500) section contains data captured from analysis carried out by Landmark of 1:1,250 and 1:2,500 scale historical Ordnance Survey mapping, identifying areas where, historically, the land uses were potentially contaminative. For the purpose of this Envirocheck module, only historical data relating to mining and ground stability has been included and plotted on the corresponding Historical Land Use Information (1:2,500) map. This section also includes the Subterranean Features data set, which details various man-made and man-used underground spaces obtained from the Subterranea Britannica society.	
Historical Land Use Information (1:10,000)	1
The Historical Land Use (1:10,000) section covers data captured from the systematic analysis carried out by Landmark of 1:10, 560 and 1:10,000 scale historical Ordnance Survey mapping dating back to the mid-19th century, identifying potentially contaminative past industrial land uses. For the purpose of this Envirocheck module, only data relating to mining and ground stability has been included and plotted on the accompanying Historical Land Use Information (1:10,000) map.	
Ground Stability Data (1:50,000)	3
The Ground Stability (1:50,000) section includes the BGS Geosure data suite, reporting features to 250m and plotted onto 3 separate maps. Also reported is brine subsidence, brine mining and salt mining data sets, of which Brine Pumping and Salt Mining Related Features are plotted, and subsidence insurance claims and insurance investigations data, which is not plotted.	
Historical Map List	4
The Historical Map List section details the historical mapping that has been analysed for your site, in relation to the Historical Land Use Information sections.	
Data Currency	5
Data Suppliers	6
Useful Contacts	7

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The brine subsidence data relating to the Droitwich area as provided in this report is derived from JPB studies and physical monitoring undertaken annually over more than 35 years. For more detailed interpretation contact enquiries@jpb.co.uk. JPB retain the copyright and intellectual rights to this data and accept no liability for any loss or damage, including in direct or consequential loss, arising from the use of this data.

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Report Version v53.0

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

Report Version v53.0

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A13SW (SW)	0	-	379517 389597
2	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A13SE (SE)	205	-	379821 389467
3	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13SE (SE)	206	-	379838 389479
4	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1934	A12NE (NW)	489	-	379066 389968
5	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A12NW (W)	622	-	378845 389682
6	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A12NW (W)	623	-	378872 389872
7	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A12NW (W)	636	-	378886 389945
8	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A8SE (S)	649	-	379817 388955
9	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A12NW (W)	652	-	378815 389684
10	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1934	A12SW (W)	655	-	378816 389624
11	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A12NW (W)	688	-	378780 389716
12	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A14NE (E)	710	-	380358 389959
13	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A14NE (E)	745	-	380413 389923
14	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A12NW (W)	749	-	378773 389971
15	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1923	A14NE (NE)	758	-	380388 390007
16	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A9SW (SE)	759	-	379993 388917
17	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A14NE (E)	770	-	380451 389889
18	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A9SW (SE)	838	-	380201 388959
19	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A7SE (SW)	858	-	379037 388865
20	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A7SE (SW)	898	-	378958 388875
21	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A19SE (NE)	913	-	380505 390113

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
22	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1934	A17NE (N)	924	-	379233 390623
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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	CBSCB Compensation District The site does not fall within the brine compensation area.				
	Brine Subsidence Solution Area The site does not fall within the brine subsidence solution area.				
25	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	379591 389667
26	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	218	1	379591 390000
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	379591 389667
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	218	1	379591 390000
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	379591 389667
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	218	1	379591 390000
27	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	379591 389667
28	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	218	1	379591 390000
29	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	379591 389667
30	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	218	1	379591 390000
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	379591 389667
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	218	1	379591 390000

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

1:2,500	Mapsheet	Published Date
Ordnance Survey Plan	SJ7989	1959

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

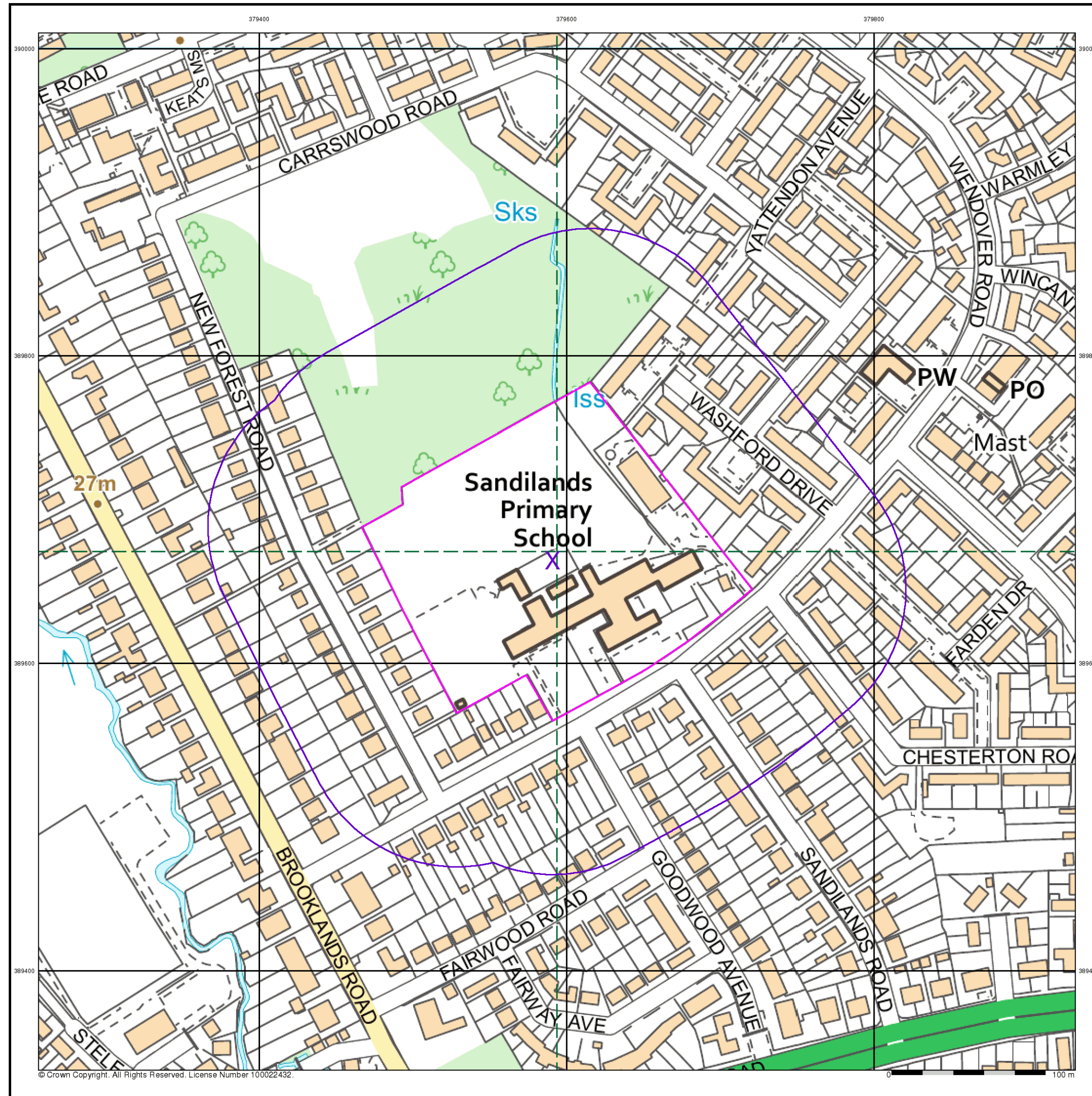
1:10,560	Mapsheet	Published Date
Lancashire And Furness	110_00	1848
Lancashire And Furness	111_00	1848
Cheshire	009_00	1882
Cheshire	018_00	1882
Lancashire And Furness	111_SW	1894
Cheshire	009_SE	1899
Cheshire	009_SW	1899
Cheshire	018_NE	1899
Cheshire	018_NW	1899
Cheshire	009_SE	1911
Cheshire	009_SW	1911
Cheshire	018_NE	1911
Cheshire	018_NW	1911
Lancashire And Furness	111_SW	1911
Lancashire And Furness	111_SW	1923
Lancashire And Furness	110_SE	1934
Cheshire	009_SE	1938
Cheshire	009_SW	1938
Cheshire	018_NE	1938
Cheshire	018_NW	1938
Ordnance Survey Plan	SJ78NE	1954
Ordnance Survey Plan	SJ79SE	1954
Ordnance Survey Plan	SJ88NW	1954
Ordnance Survey Plan	SJ89SW	1955
1:10,000	Mapsheet	Published Date
Ordnance Survey Plan	SJ89SW	1989
Ordnance Survey Plan	SJ78NE	1991
Ordnance Survey Plan	SJ79SE	1991
Ordnance Survey Plan	SJ88NW	1996

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

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
British Geological Survey	 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
The Coal Authority	 The Coal Authority
Ove Arup	
Stantec UK Ltd	 Stantec
Wardell Armstrong	 wardell armstrong your earth our world
Johnson Poole & Bloomer	

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
-	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



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Historical Land Use Information (1:2,500)

General

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

Potentially Contaminative Industrial Uses (Extractive Industries Activity)

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

Subterranean Features

	Point	Line	Polygon
Subterranean Features	▼	- - -	■

Mining and Ground Stability - Segment A13

Order Details

Order Number: 279317373_1_1
Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Plot Buffer (m): 100

Site Details

Sandilands Primary School, Wendover Road, MANCHESTER, M23 9JX

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A Landmark Information Group Service v50.0 25-May-2021 Page 1 of 1

Geology 1:50,000 Maps Legends

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
	GFSD	Glaciofluvial Sheet Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	GFDUD	Glaciofluvial Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	TILLD	Till, Devensian	Diamicton	Not Supplied - Devensian
	SSA	Shirdley Hill Sand Formation	Sand	Not Supplied - Devensian
	RTDU	River Terrace Deposits (Undifferentiated)	Sand and Gravel	Not Supplied - Quaternary

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	BOM	Bollin Mudstone Member	Mudstone	Not Supplied - Anisian
	HEY	Helsby Sandstone Formation	Sandstone, Pebbly (Gravelly)	Not Supplied - Anisian
	TPSF	Tarporley Siltstone Formation	Siltstone, Mudstone and Sandstone	Not Supplied - Olenekian
	WLSF	Wilmslow Sandstone Formation	Sandstone	Not Supplied - Early Triassic
		Faults		

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Geology 1:50,000 Maps

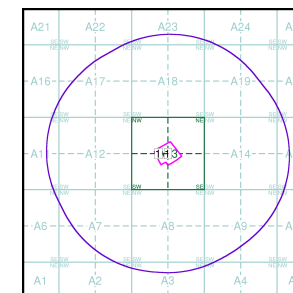
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published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

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

Geology 1:50,000 Maps Coverage

Map ID: 1
Map Sheet No: 098
Map Name: Stockport
Map Date: 1962
Bedrock Geology: Available
Superficial Geology: Available
Artificial Geology: Not Available
Faults: Not Supplied
Landslip: Available
Rock Segments: Not Supplied

Geology 1:50,000 Maps - Slice A



Order Details:

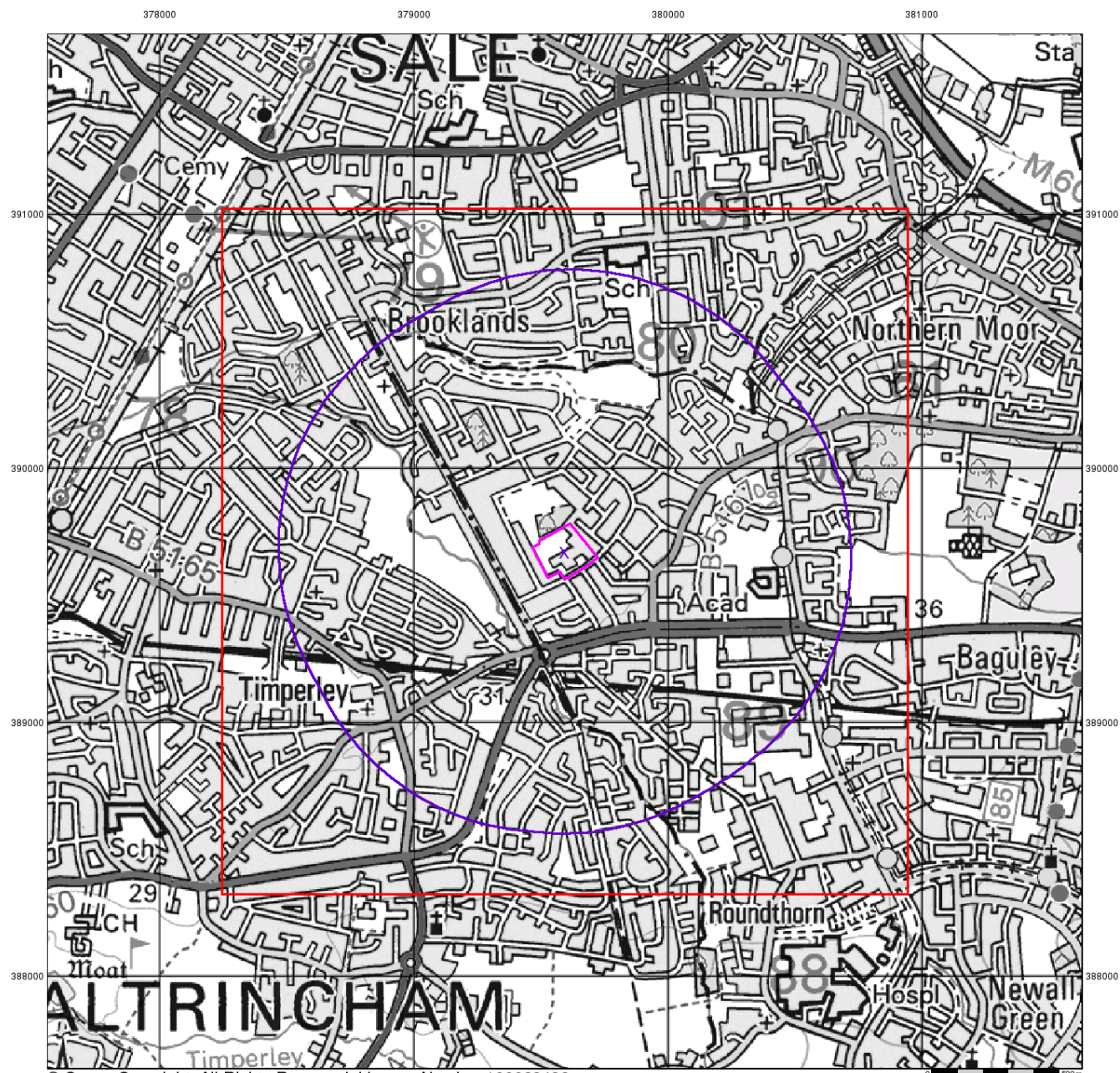
Order Number: 279317373_1_1
Customer Reference: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Search Buffer (m): 1000

Site Details:

Sandilands Primary School, Wendover Road, MANCHESTER, M23 9JX

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Artificial Ground and Landslip

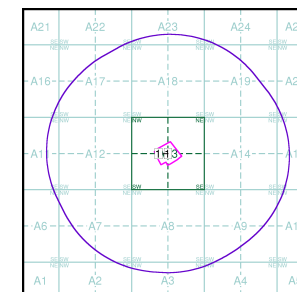
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions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

Artificial ground includes:

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

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

Artificial Ground and Landslip Map - Slice A



Order Details:

Order Number: 279317373_1_1
 Customer Reference: 2548 TG
 National Grid Reference: 379590, 389670
 Slice: A
 Site Area (Ha): 3.24
 Search Buffer (m): 1000

Site Details:

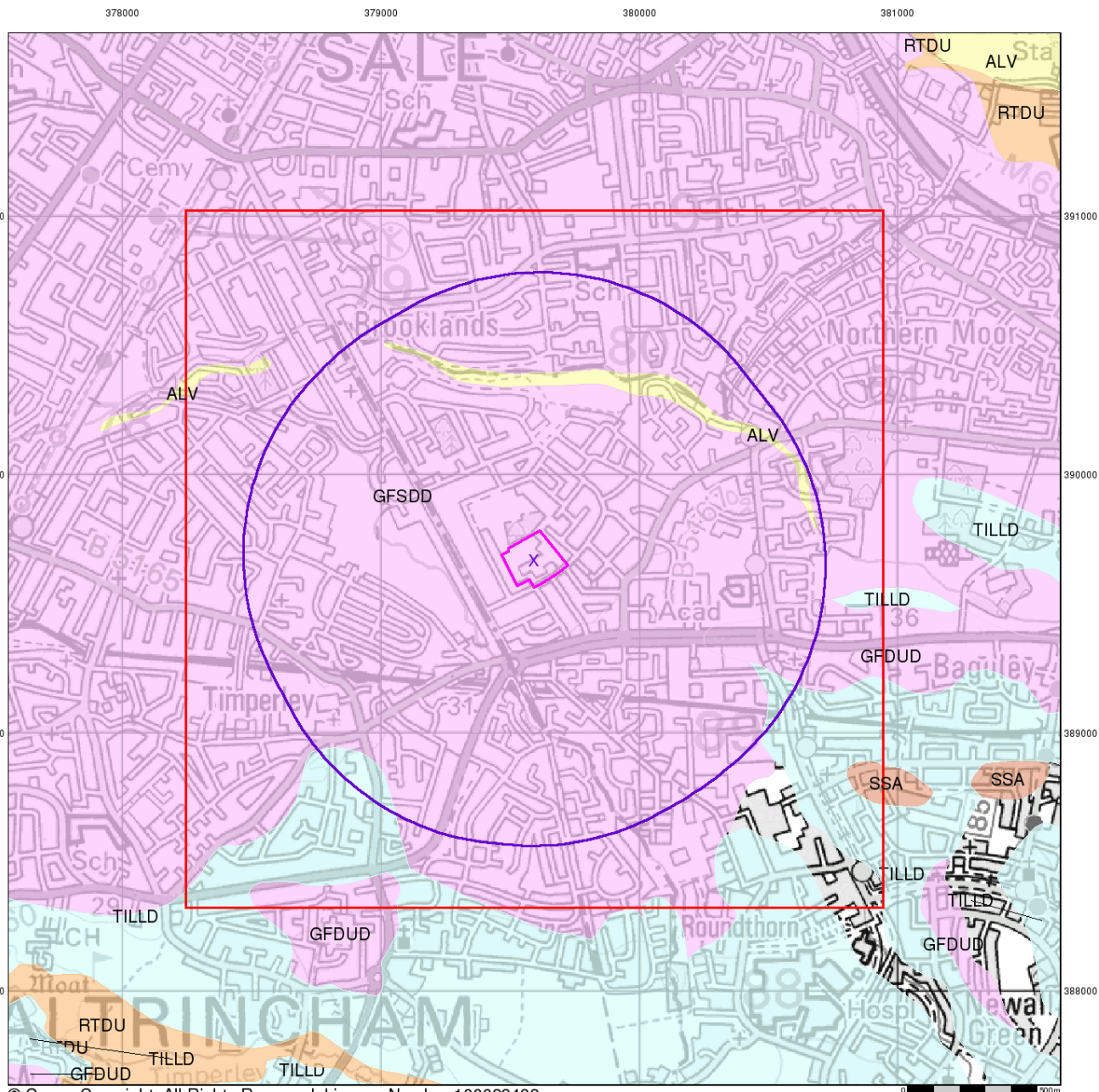
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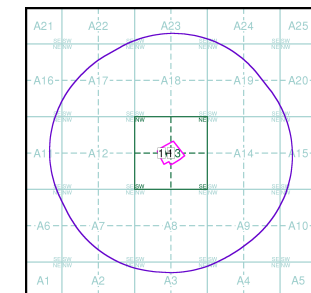
Superficial Geology

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

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

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

Superficial Geology Map - Slice A



Order Details:

Order Number: 279317373_1_1
 Customer Reference: 2548 TG
 National Grid Reference: 379590, 389670
 Slice: A
 Site Area (Ha): 3.24
 Search Buffer (m): 1000

Site Details:

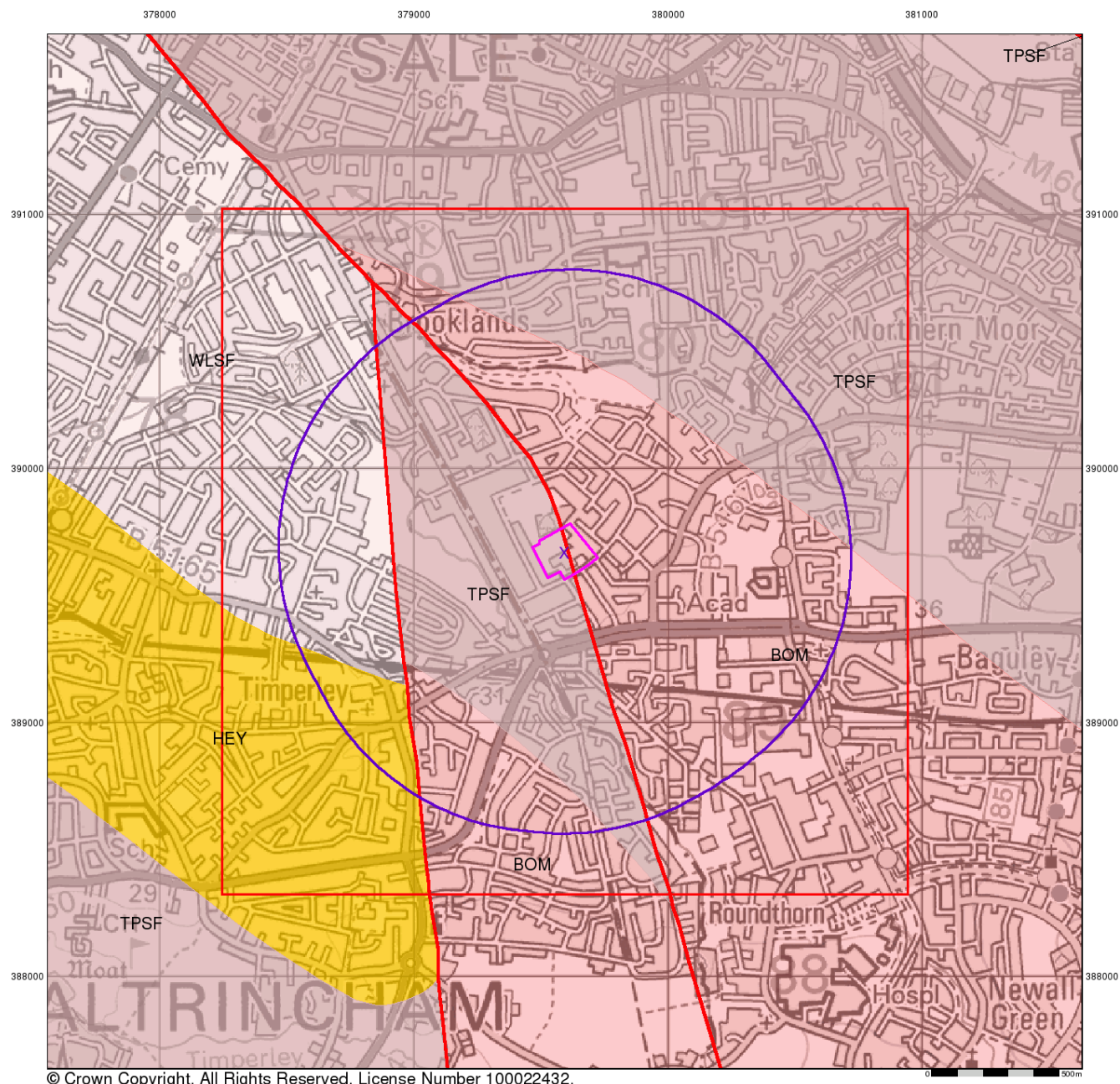
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Bedrock and Faults

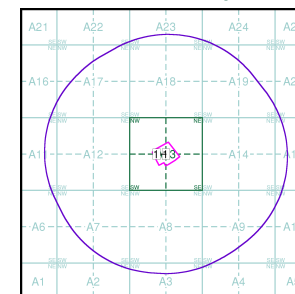
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

Bedrock and Faults Map - Slice A



Order Details:

Order Number: 279317373_1_1
 Customer Reference: 2548 TG
 National Grid Reference: 379590, 389670
 Slice: A
 Site Area (Ha): 3.24
 Search Buffer (m): 1000

Site Details:

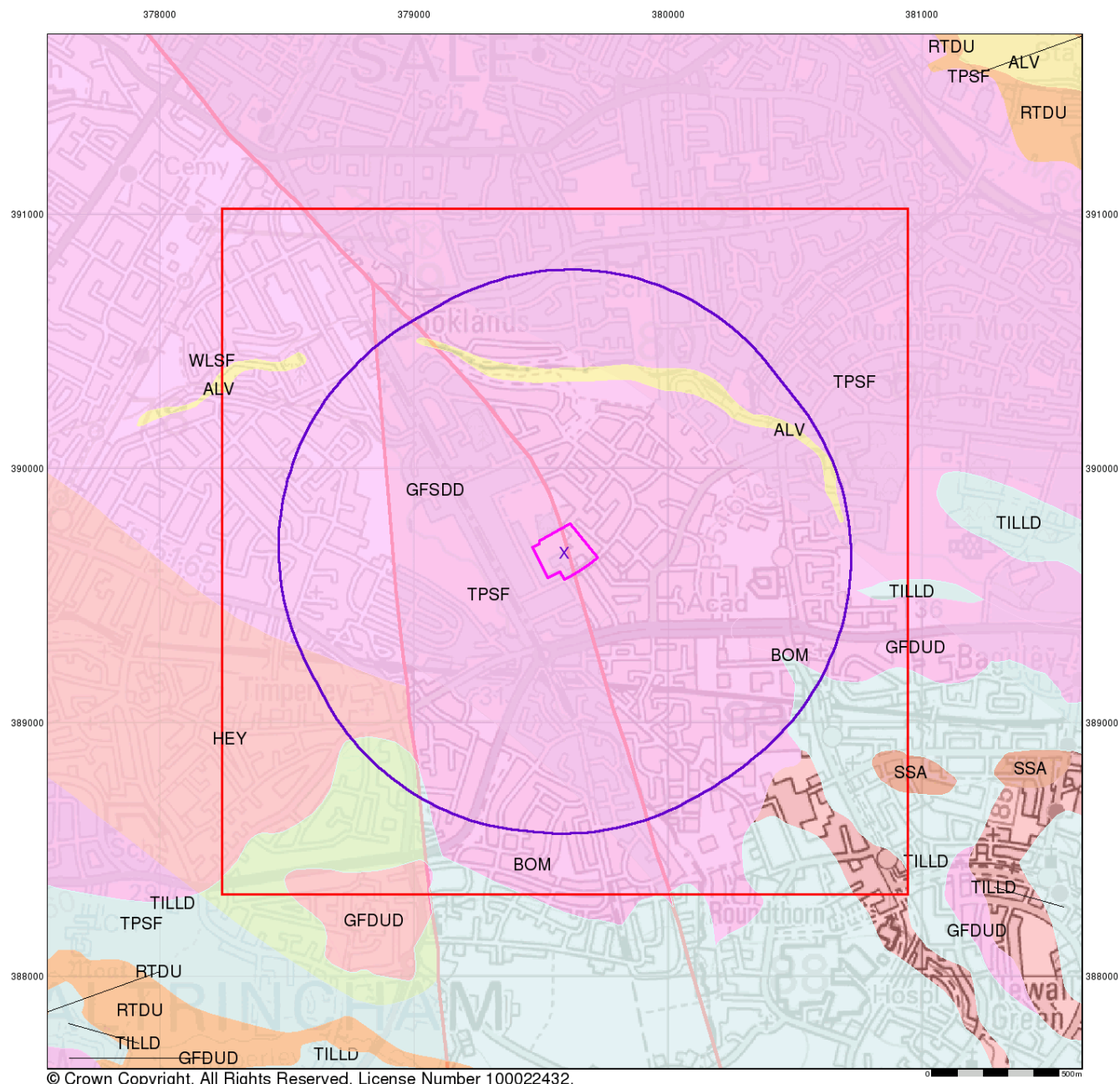
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Combined Surface Geology

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

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

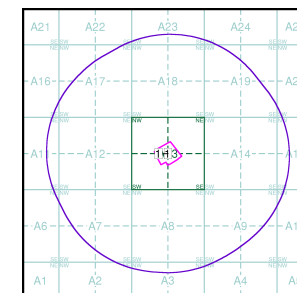
Additional Information

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

Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

Combined Geology Map - Slice A



Order Details:

Order Number: 279317373_1_1
Customer Reference: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Search Buffer (m): 1000

Site Details:

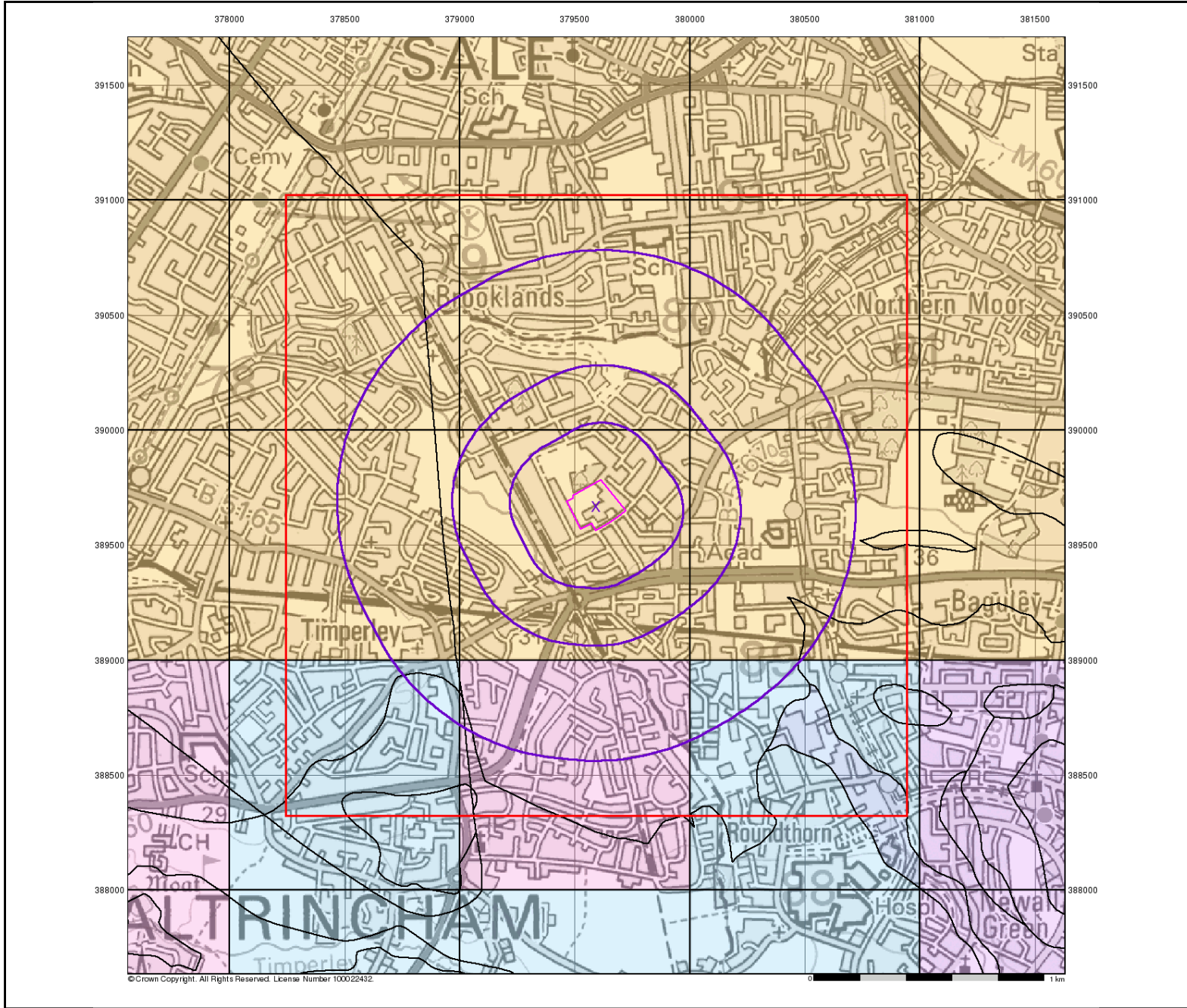
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Groundwater Vulnerability

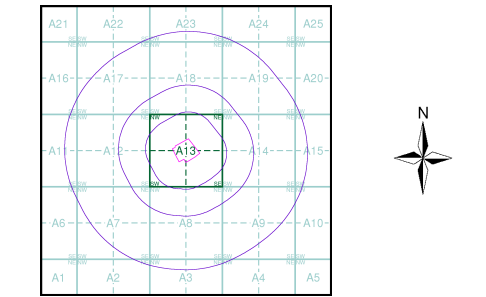
- General**
- Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
 - Slice
 - Map ID

Agency and Hydrological

- | Bedrock Aquifers | Superficial Aquifers |
|---|---|
| High Vulnerability, Principal Aquifer | High Vulnerability, Principal Aquifer |
| High Vulnerability, Secondary Aquifer | High Vulnerability, Secondary Aquifer |
| Medium Vulnerability, Principal Aquifer | Medium Vulnerability, Principal Aquifer |
| Medium Vulnerability, Secondary Aquifer | Medium Vulnerability, Secondary Aquifer |
| Low Vulnerability, Principal Aquifer | Low Vulnerability, Principal Aquifer |
| Low Vulnerability, Secondary Aquifer | Low Vulnerability, Secondary Aquifer |

- Unproductive Aquifer
- Soluble Rock

Site Sensitivity Context Map - Slice A



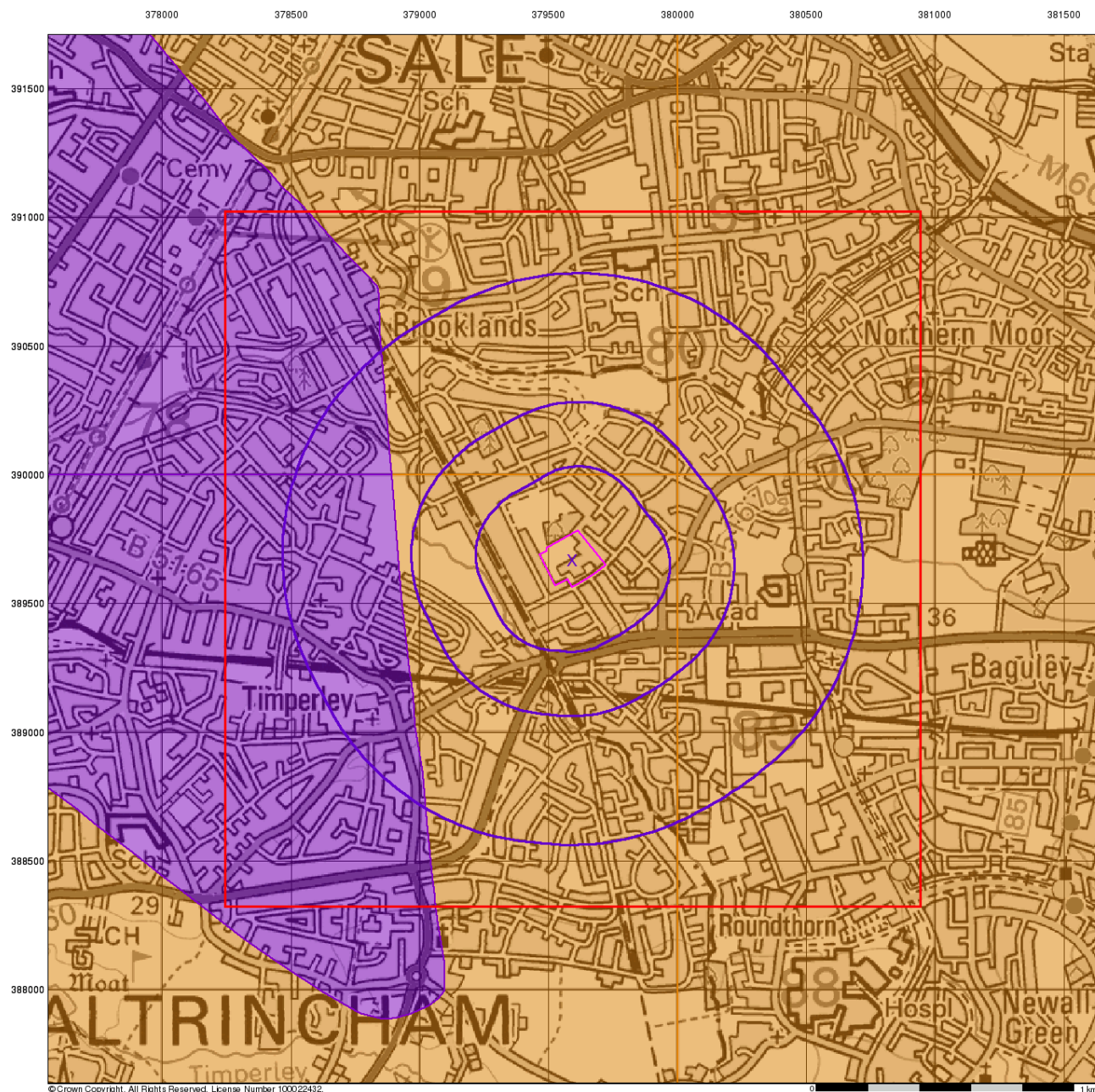
Order Details

Order Number: 279317373_1_1
Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Search Buffer (m): 1000

Site Details
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0 1 km

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Bedrock Aquifer Designation

General

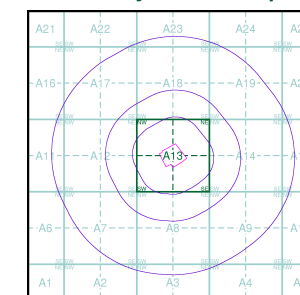
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

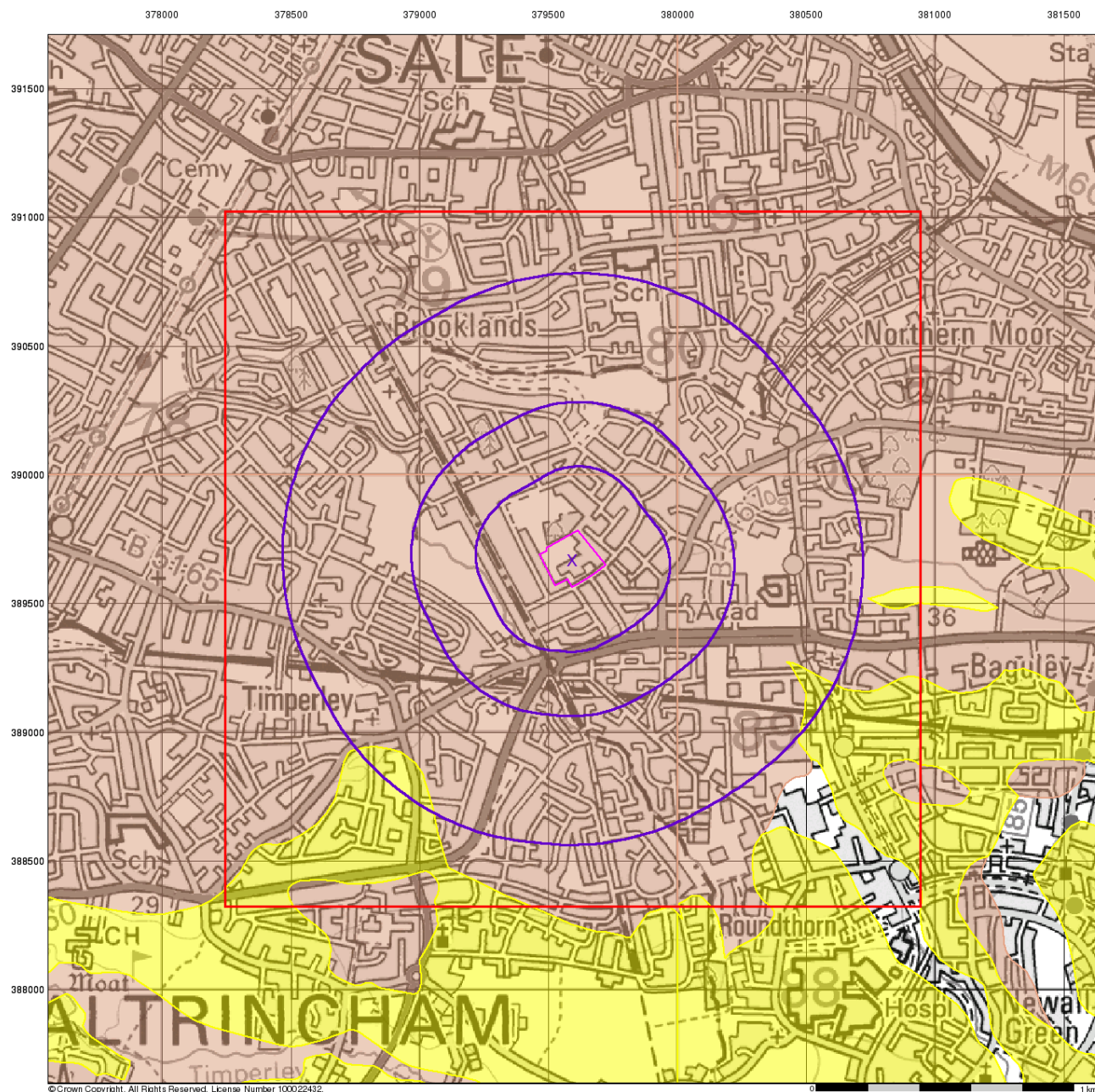
Order Number: 279317373_1_1
 Customer Ref: 2548 TG
 National Grid Reference: 379590, 389670
 Slice: A
 Site Area (Ha): 3.24
 Search Buffer (m): 1000

Site Details

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Superficial Aquifer Designation

General

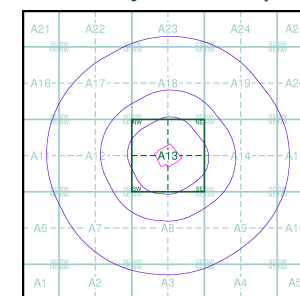
- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point
- Slice
- B Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

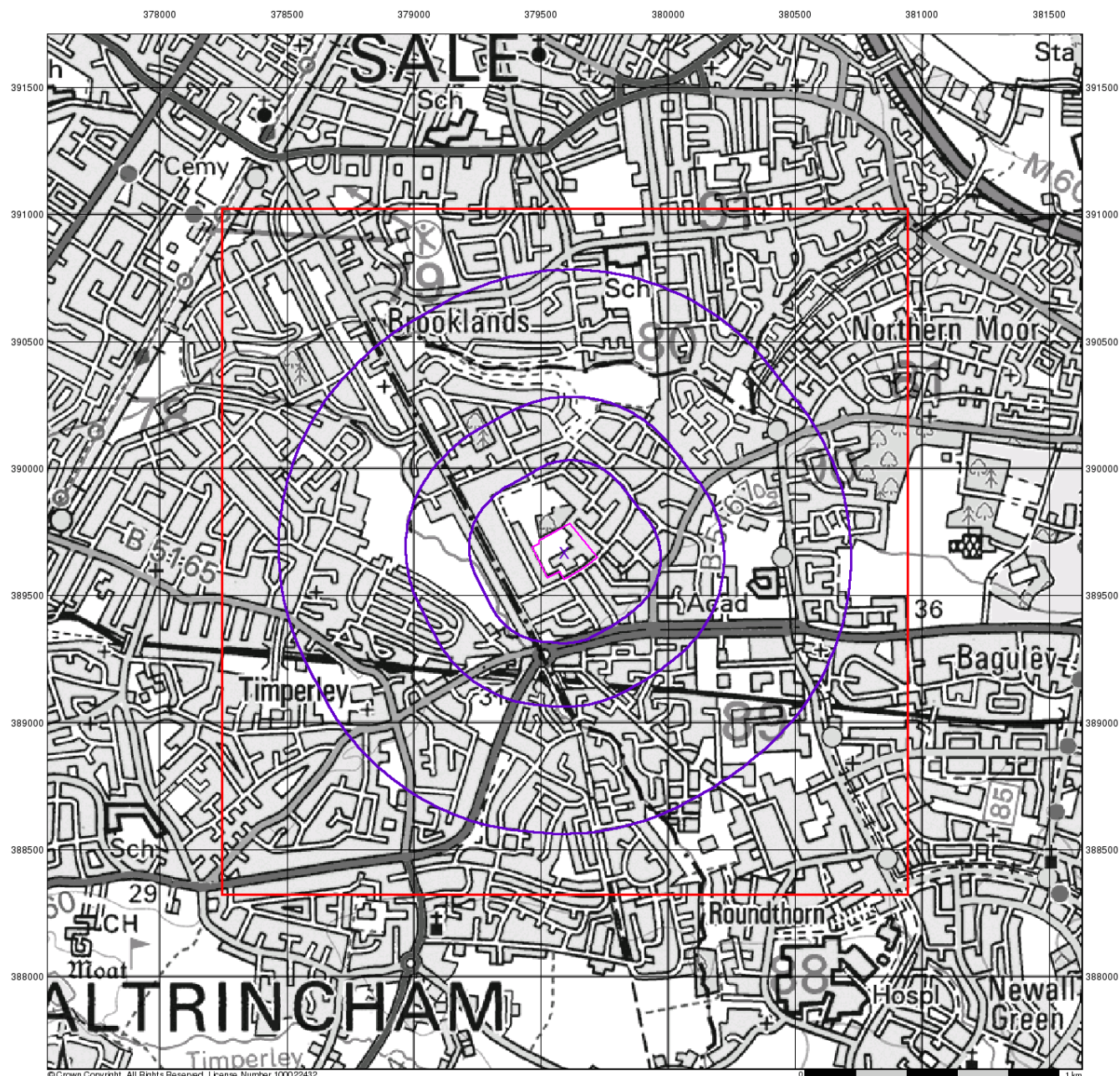
Order Number: 279317373_1_1
 Customer Ref: 2548 TG
 National Grid Reference: 379590, 389670
 Slice: A
 Site Area (Ha): 3.24
 Search Buffer (m): 1000

Site Details

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Source Protection Zones

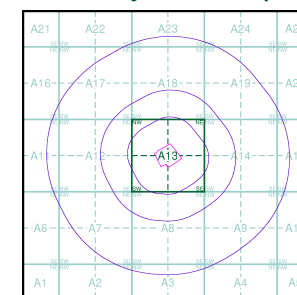
General

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

Agency and Hydrological

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

Site Sensitivity Context Map - Slice A



Order Details

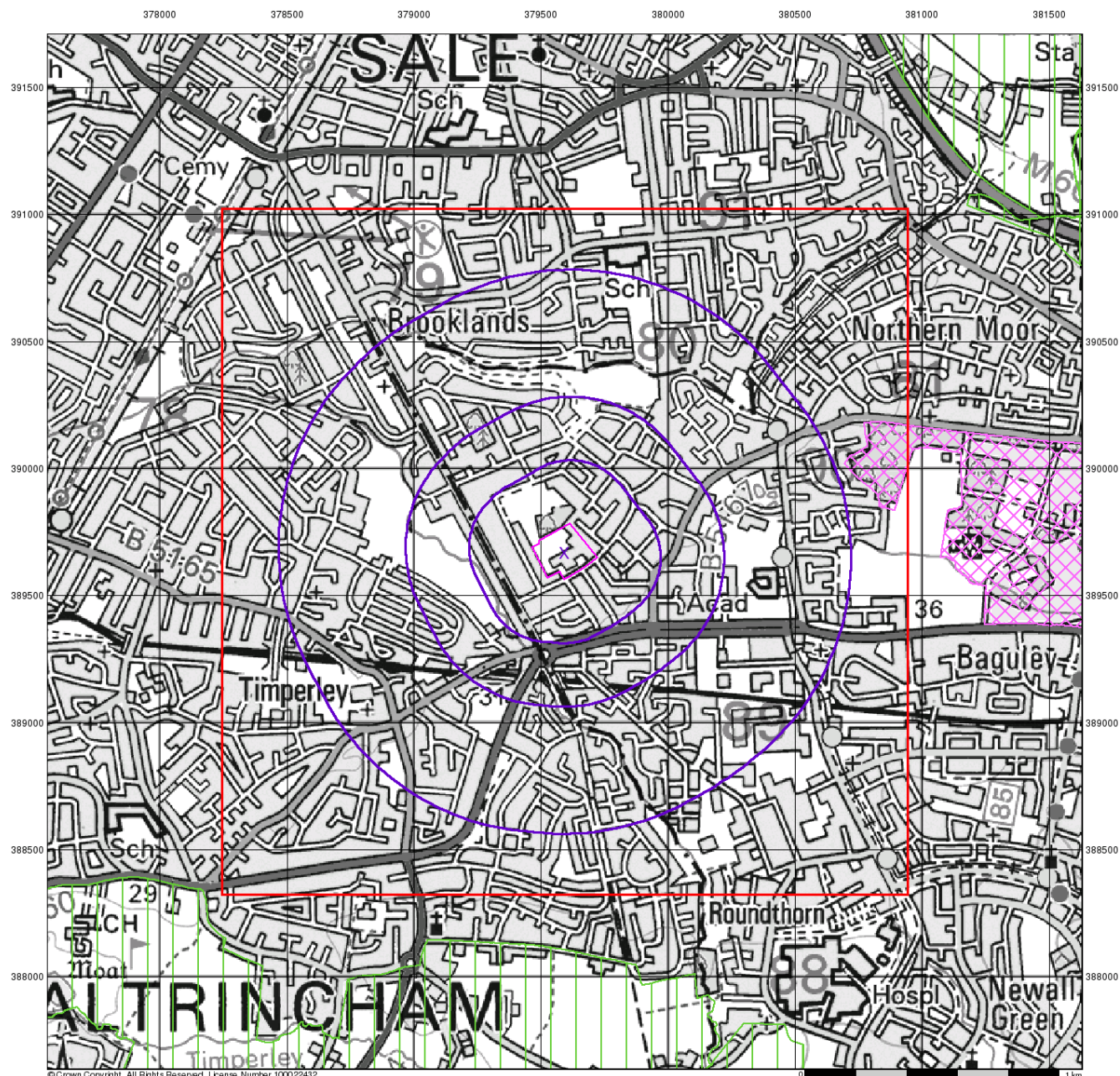
Order Number: 279317373_1_1
 Customer Ref: 2548 TG
 National Grid Reference: 379590, 389670
 Slice: A
 Site Area (Ha): 3.24
 Search Buffer (m): 1000

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Sensitive Land Uses

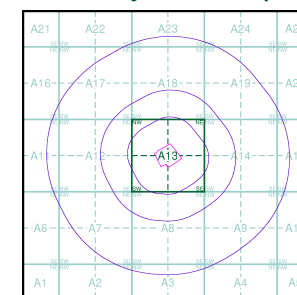
General

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

Sensitive Land Uses

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

Site Sensitivity Context Map - Slice A



Order Details

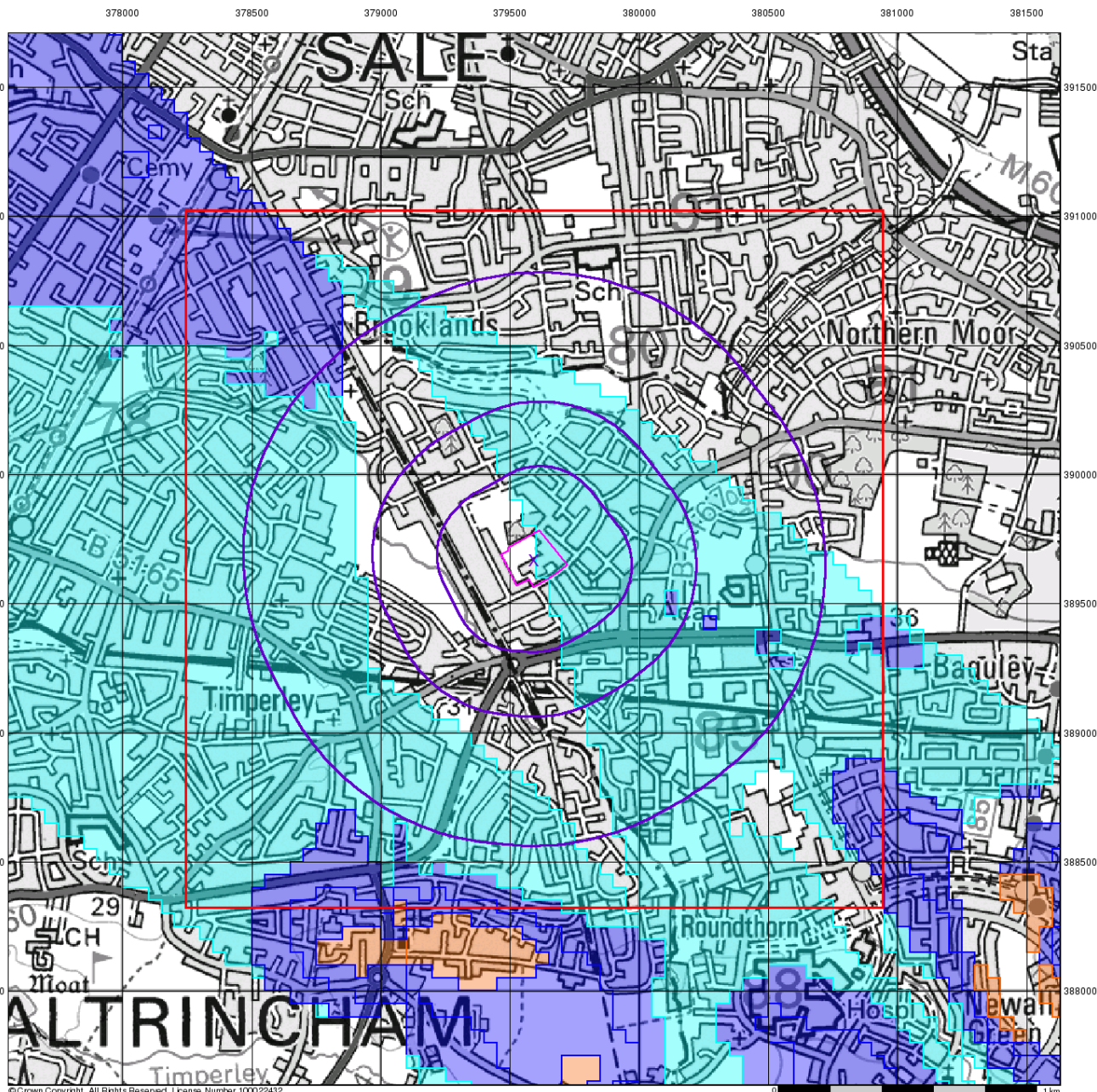
Order Number: 279317373_1_1
 Customer Ref: 2548 TG
 National Grid Reference: 379590, 389670
 Slice: A
 Site Area (Ha): 3.24
 Search Buffer (m): 1000

Site Details

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BGS Flood GFS Data

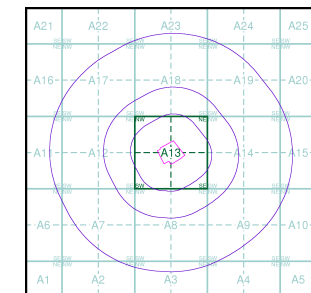
General

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

Agency and Hydrological (Flood)

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

Site Sensitivity Context Map - Slice A



Order Details

Order Number: 279317373_1_1
 Customer Ref: 2548 TG
 National Grid Reference: 379590, 389670
 Slice: A
 Site Area (Ha): 3.24
 Search Buffer (m): 1000

Site Details

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Envirocheck[®] Report:

Datasheet

Order Details:

Order Number:

279317373_1_1

Customer Reference:

2548 TG

National Grid Reference:

379590, 389670

Slice:

A

Site Area (Ha):

3.24

Search Buffer (m):

1000

Site Details:

Sandilands Primary School, Wendover Road
MANCHESTER
M23 9JX

Client Details:

1ST HORIZON
The Old Pop Factory 88-90 High Street
Dodworth
Barnsley
S75 3RQ

Report Section	Page Number
Summary	-
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Waste	11
Hazardous Substances	-
Geological	13
Industrial Land Use	16
Sensitive Land Use	-
Data Currency	29
Data Suppliers	35
Useful Contacts	36

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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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					
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 1			1	4
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 1	Yes			
Pollution Incidents to Controlled Waters	pg 2			10	9
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances	pg 5				9
River Quality	pg 6		1		1
River Quality Biology Sampling Points					
Substantiated Pollution Incident Register					
River Quality Chemistry Sampling Points					
Water Abstractions	pg 7				(*1)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 7	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 7	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 7	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences	pg 7		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 7		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 7		5	7	15

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)					
Potentially Infilled Land (Water)	pg 11	1	2	1	20
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
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 13	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 13	Yes		Yes	Yes
BGS Recorded Mineral Sites					
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
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	pg 14	Yes	Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 15	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 15	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards				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 16		3	7	72
Fuel Station Entries	pg 23				4
Points of Interest - Commercial Services	pg 23			3	30
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 26			1	2
Points of Interest - Public Infrastructure	pg 26				9
Points of Interest - Recreational and Environmental	pg 27		3		6
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					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (E)	0	1	379600 389667
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NW (N)	218	1	379591 390000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A14SW (E)	280	1	380000 389667
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14SW (E)	392	1	380100 389550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A14NW (NE)	437	1	380000 390000
1	Local Authority Pollution Prevention and Controls Name: Tcs Altrincham Road Location: Altrincham Road, Baguley, MANCHESTER, Lancashire, M23 9LD Authority: Manchester City Council, Environmental Health Department Permit Reference: PFS/57/98-03 Dated: 14th December 1998 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station Status: Authorisation revoked Positional Accuracy: Located by supplier to within 10m	A14SW (SE)	468	2	380135 389432
2	Local Authority Pollution Prevention and Controls Name: Tesco Stores Baguley Location: Altrincham Road, Wythenshawe, MANCHESTER, Lancashire, M23 9TJ Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/PFS/RM/043/06 Dated: 24th September 1998 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station Status: Authorised Positional Accuracy: Manually positioned to the address or location	A9NW (SE)	634	2	380219 389257
3	Local Authority Pollution Prevention and Controls Name: Laundryplus Location: 298 Park Road, Timpereley, Altrincham, Wa15 6ua Authority: Trafford Metropolitan Borough Council, Environmental Health Department Permit Reference: 174 Dated: 23rd October 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Authorisation revoked Positional Accuracy: Manually positioned to the address or location	A7NW (SW)	822	3	378906 389032
3	Local Authority Pollution Prevention and Controls Name: Johnsons Cleaners Location: 363 Stockport Road, Timperley, Wa15 7ug Authority: Trafford Metropolitan Borough Council, Environmental Health Department Permit Reference: 162 Dated: 26th October 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Manually positioned to the address or location	A7NW (SW)	826	3	378910 389020
4	Local Authority Pollution Prevention and Controls Name: Shell Baguley Location: Altrincham Road, Baguley, MANCHESTER, Lancashire, M23 9AA Authority: Manchester City Council, Environmental Health Department Permit Reference: PPC/PFS/RM/034/05 Dated: 23rd December 1998 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station Status: Authorised Positional Accuracy: Manually positioned to the address or location	A14SE (E)	935	2	380604 389342
	Nearest Surface Water Feature	A13NW (N)	0	-	379592 389770

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Unknown Note: Fairywell Brook Incident Date: 10th June 1992 Incident Reference: 92511008 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	270	4	379500 389300
5	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Other Fuel Oil Note: Fairywell Brook Incident Date: 3rd March 1994 Incident Reference: 94510393 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	275	4	379500 389295
6	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: None Affected; Flood Threat Incident Date: 2nd December 1996 Incident Reference: 96512465 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	295	4	379405 389300
6	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Other Note: Fairywell Brook; Trade Effluent & Sewage Incident Date: 29th July 1995 Incident Reference: 95511911 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Deliberate Disposal To Drain Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	297	4	379400 389300
6	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: Fairywell Brook Incident Date: 26th August 1995 Incident Reference: 95512188 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	300	4	379405 389295
6	Pollution Incidents to Controlled Waters Property Type: Spillage; Accident In Transit Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Other Note: Fairywell Brook; Sugar Incident Date: 21st August 1995 Incident Reference: 95512153 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Wrong Connection Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A8NW (SW)	302	4	379400 389295

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	Pollution Incidents to Controlled Waters Property Type: Pollution Found Source Not Determined Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Miscellaneous - Colour Note: Fairywell Brook; Fluorescein Dye Incident Date: 3rd April 1996 Incident Reference: 96510665 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	369	4	379500 389200
7	Pollution Incidents to Controlled Waters Property Type: Manufacturing Location: Fairywell Brook, Off Blyth C Authority: Environment Agency, North West Region Pollutant: Organic Chemicals : Mineral & Synthetic Oils Note: Not Supplied Incident Date: 4th March 1999 Incident Reference: 978 Catchment Area: Fairywell Brook Receiving Water: River Stretch (Freshwater) Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	374	4	379500 389195
8	Pollution Incidents to Controlled Waters Property Type: WSC Sewage, Sewerage & Supply: Anglian Water Limited Location: Fairywell Brook, New Red Row Estate, Brooklands Roundabout, Greater Manchester Authority: Environment Agency, North West Region Pollutant: Other Note: Not Supplied Incident Date: 21st July 1999 Incident Reference: 30417 Catchment Area: Red / Baguley / Sinderland Brook Receiving Water: Freshwater Stream/River Cause of Incident: Wrong Connection Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NE (S)	463	4	379600 389100
9	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Unknown Note: Fairywell Brook Incident Date: 2nd June 1993 Incident Reference: 93511114 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	469	4	379500 389100
10	Pollution Incidents to Controlled Waters Property Type: Connection To Surface Drains Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Crude Sewage Note: Fairywell Brook; Sewage Incident Date: 6th August 1996 Incident Reference: 96511729 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Wrong Connection Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NE (S)	563	4	379600 389000
11	Pollution Incidents to Controlled Waters Property Type: Connection To Surface Drains Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Crude Sewage Note: Fairywell Brook Incident Date: 8th July 1995 Incident Reference: 95511681 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Wrong Connection Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A8NW (S)	569	4	379500 389000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
12	Pollution Incidents to Controlled Waters Property Type: Boats/Ships Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: None Incident Date: 27th September 1994 Incident Reference: 94512167 Catchment Area: Sinderland Brook Receiving Water: Groundwater Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7NE (SW)	572	4	379200 389100
13	Pollution Incidents to Controlled Waters Property Type: Boats/Ships Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: None Incident Date: 17th October 1994 Incident Reference: 94512300 Catchment Area: Sinderland Brook Receiving Water: Groundwater Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (SE)	593	4	380200 389300
14	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Oils - Unknown Note: Fairywell Brook; Oil Incident Date: 12th November 1996 Incident Reference: 96512332 Catchment Area: Weaver Receiving Water: Not Given Cause of Incident: Miscellaneous/Other Pollution Type Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8SE (S)	695	4	379800 388900
15	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Timperley Conser Club Authority: Environment Agency, North West Region Pollutant: Not Given Note: Not Applicable; No Pollution Incident Date: 8th April 1997 Incident Reference: 97510571 Catchment Area: Sinderland Brook Receiving Water: Pond/Lake Cause of Incident: Unknown Incident Severity: Category 1 - Major Incident Positional Accuracy: Located by supplier to within 100m	A12NW (W)	700	4	378800 389900
16	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: None Affected; None Pollution Found Incident Date: 28th August 1996 Incident Reference: 96511926 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	764	4	378900 390200
17	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Surface Water Note: Baguely Brook Incident Date: 28th January 1991 Incident Reference: 91510093 Catchment Area: Manchester Ship Canal Receiving Water: Not Given Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	781	4	380200 390300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	Pollution Incidents to Controlled Waters Property Type: Not Given Location: Location Description Not Available Authority: Environment Agency, North West Region Pollutant: Oils - Unknown Note: Mill Brook Incident Date: 10th February 1995 Incident Reference: 95510271 Catchment Area: Sinderland Brook Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9SW (SE)	967	4	380200 388800
19	Registered Radioactive Substances Name: Gv Instruments Ltd Location: Crewe Road, Wythenshawe, Manchester, Greater Manchester, M23 9be Authority: Environment Agency, North West Region Permit Reference: By0747 Dated: 8th September 2004 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is not the subject of an authorisation, or an application for an authorisation Status: Authorisation either revoked or cancelled Positional Accuracy: Manually positioned to the road within the address or location	A14NE (E)	628	4	380316 389846
20	Registered Radioactive Substances Name: Magnox Electric Ltd Location: Technology Division, Timpson Road, MANCHESTER, Greater Manchester, M23 9LL Authority: Environment Agency, North West Region Permit Reference: AC9777 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation either revoked or cancelled Positional Accuracy: Manually positioned to the road within the address or location	A9NE (SE)	701	4	380290 389240
20	Registered Radioactive Substances Name: Magnox Electric Ltd Location: Technology Division, Timpson Road, MANCHESTER, Greater Manchester, M23 9LL Authority: Environment Agency, North West Region Permit Reference: AC9769 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation either revoked or cancelled Positional Accuracy: Manually positioned to the road within the address or location	A9NE (SE)	701	4	380290 389240
20	Registered Radioactive Substances Name: Magnox Electric Ltd Location: Technology Division, Timpson Road, MANCHESTER, Greater Manchester, M23 9LL Authority: Environment Agency, North West Region Permit Reference: AC9831 Dated: 31st March 1991 Process Type: Registration under S10 RSA for the keeping and use of mobile Radioactive sources (was RSA60 S3) Description: Authorisation under RSA Status: Authorisation either revoked or cancelled Positional Accuracy: Manually positioned to the road within the address or location	A9NE (SE)	701	4	380290 389240
20	Registered Radioactive Substances Name: Magnox Electric Ltd Location: Technology Division, Timpson Road, MANCHESTER, Greater Manchester, M23 9LL Authority: Environment Agency, North West Region Permit Reference: AC9742 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation either revoked or cancelled Positional Accuracy: Manually positioned to the road within the address or location	A9NE (SE)	701	4	380290 389240

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	Registered Radioactive Substances Name: Serco Assurance Location: Timpson Road, Wythenshawe, MANCHESTER, Greater Manchester, M23 9LL Authority: Environment Agency, North West Region Permit Reference: Bu9211 Dated: 19th May 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation either revoked or cancelled Positional Accuracy: Manually positioned to the road within the address or location	A9NE (SE)	730	4	380326 389241
20	Registered Radioactive Substances Name: Serco Assurance Location: Timpson Road, Wythenshawe, MANCHESTER, Greater Manchester, M23 9LL Authority: Environment Agency, North West Region Permit Reference: Bs7293 Dated: 29th August 2002 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the road within the address or location	A9NE (SE)	730	4	380326 389241
21	Registered Radioactive Substances Name: Magnox Electric Ltd Location: Technology Division, Timpson Road, Wythenshawe, MANCHESTER, Greater Manchester, M23 9LL Authority: Environment Agency, North West Region Permit Reference: AG2901 Dated: 27th October 1992 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation either revoked or cancelled Positional Accuracy: Manually positioned to the address or location	A9NE (SE)	796	4	380371 389189
21	Registered Radioactive Substances Name: Magnox Electric Ltd Location: Technology Division, Timpson Road, Wythenshawe, MANCHESTER, Greater Manchester, M23 9LL Authority: Environment Agency, North West Region Permit Reference: AK1258 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variation Positional Accuracy: Manually positioned to the address or location	A9NE (SE)	796	4	380371 389189
	River Quality Name: Fairywell Bk GQA Grade: River Quality B Reach: Qsl At Whitecarr Lane To Sinderland Bk Estimated Distance (km): 4.3 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A13SW (SW)	225	4	379332 389453
	River Quality Name: Sinderland (Baguley) Bk GQA Grade: River Quality D Reach: Qsl At Portway To Fairywell Bk Estimated Distance (km): 7.6 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A18SE (N)	532	4	379614 390315

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: C Renshaw Licence Number: 2569017004 Permit Version: Not Supplied Location: Spring Fed Well, Northenden Road, SALE Authority: Environment Agency, North West Region Abstraction: Other Spray Irrigation (Summer) Abstraction Type: Not Supplied Source: Spring Daily Rate (m3): 0 Yearly Rate (m3): 54 Details: Licence Status: Lapsed 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	A25NW (NE)	1840	4	380900 391100
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: High Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: >70% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: High	A13SW (W)	0	5	379591 389667
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - B	A13SW (W)	0	5	379591 389667
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13SW (W)	0	5	379591 389667
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SW (SW)	134	4	379383 389557
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A13SW (SW)	179	4	379351 389521
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
22	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 120.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A13NW (N)	1	6	379592 389771
23	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1998.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A13SW (SW)	186	6	379343 389522

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
24	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 59.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A13SW (SW)	246	6	379439 389339
25	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.5 Watercourse Level: Underground Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A13SW (SW)	246	6	379439 389339
26	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 17.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A13SW (SW)	249	6	379430 389340
27	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 12.7 Watercourse Level: Underground Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A13SW (SW)	258	6	379413 389338
28	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 18.5 Watercourse Level: Underground Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A8NW (S)	295	6	379455 389283
29	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 27.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A8NW (S)	310	6	379462 389266
30	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 40.9 Watercourse Level: Underground Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A8NW (S)	331	6	379475 389242
31	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 35.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A8NW (S)	360	6	379500 389209
32	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 15.3 Watercourse Level: Underground Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A8NW (S)	389	6	379517 389179

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 223.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A8NW (S)	403	6	379523 389165
34	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 23.8 Watercourse Level: Underground Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A8NE (S)	563	6	379650 389004
35	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 216.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A8SE (S)	577	6	379670 388991
36	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1446.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A18NE (N)	591	6	379678 390370
37	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 113.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A18NE (N)	680	6	379867 390414
38	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Mill Brook Catchment Name: Mersey Primacy: 1	A8SE (S)	698	6	379846 388914
39	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1630.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Fairywell Brook Catchment Name: Mersey Primacy: 1	A8SE (S)	698	6	379846 388914
40	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 494.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Mill Brook Catchment Name: Mersey Primacy: 1	A8SE (S)	699	6	379849 388914
41	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A19SE (NE)	802	6	380294 390216

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
42	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 89.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A19SE (NE)	804	6	380298 390215
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 58.1 Watercourse Level: Underground Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A19SE (NE)	858	6	380383 390194
44	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 92.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A19SE (NE)	896	6	380440 390183
45	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 517.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A19SE (E)	900	6	380539 390027
46	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 202.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Mersey Primacy: 1	A15SW (E)	954	6	380675 389654
47	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 1.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A17NE (NW)	958	6	378986 390528
48	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 96.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Baguley Brook Catchment Name: Mersey Primacy: 1	A17NE (NW)	959	6	378985 390528

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Landfill Coverage Name: Manchester City Council - Had landfill data but passed it to the relevant environment agency		0	7	379591 389667
	Local Authority Landfill Coverage Name: Trafford Metropolitan Borough Council - Has not been able to supply Landfill data		143	3	379375 389553
49	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A13SW (SW)	0	-	379517 389597
50	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A13SE (SE)	205	-	379821 389467
51	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A13SE (SE)	206	-	379838 389479
52	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1934	A12NE (NW)	489	-	379066 389968
53	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A12NW (W)	622	-	378845 389682
54	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1938	A12NW (W)	623	-	378872 389872
55	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A12NW (W)	636	-	378886 389945
56	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A8SE (S)	649	-	379817 388955
57	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A12NW (W)	652	-	378815 389684
58	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1934	A12SW (W)	655	-	378816 389624
59	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A12NW (W)	688	-	378780 389716
60	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A14NE (E)	710	-	380358 389959
61	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A14NE (E)	745	-	380413 389923
62	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A12NW (W)	749	-	378773 389971
63	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1923	A14NE (NE)	758	-	380388 390007
64	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A9SW (SE)	759	-	379993 388917
65	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A14NE (E)	770	-	380451 389889
66	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A9SW (SE)	838	-	380201 388959
67	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A7SE (SW)	858	-	379037 388865

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
68	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A7SE (SW)	898	-	378958 388875
69	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A19SE (NE)	913	-	380505 390113
70	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1934	A17NE (N)	924	-	379233 390623
71	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1954	A15SW (E)	954	-	380674 389673
72	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1911	A11NE (W)	955	-	378512 389695

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Triassic Rocks (Undifferentiated)	A13SW (W)	0	1	379591 389667
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil 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 mg/kg	A13SW (W)	0	1	379591 389667
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: <15 mg/kg	A14NW (NE)	437	1	380000 390000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 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	A12SE (W)	549	1	378923 389612
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: <15 mg/kg	A18SW (N)	562	1	379556 390342
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil 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 mg/kg	A18NW (N)	613	1	379528 390391
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: <15 mg/kg	A19SW (NE)	651	1	380000 390308

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel <15 mg/kg Concentration:	A18NW (N)	718	1	379591 390500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic <15 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel 15 - 30 mg/kg Concentration:	A9NE (SE)	802	1	380427 389270
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 15 - 25 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: 100 - 200 mg/kg Nickel <15 mg/kg Concentration:	A17NE (NW)	884	1	379088 390500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic 25 - 35 mg/kg Concentration: Cadmium <1.8 mg/kg Concentration: Chromium 60 - 90 mg/kg Concentration: Lead Concentration: <100 mg/kg Nickel <15 mg/kg Concentration:	A19SE (NE)	913	1	380500 390124
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	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: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	379591 389667
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	218	1	379591 390000
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	379591 389667
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	218	1	379591 390000
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	379591 389667

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	218	1	379591 390000
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	379591 389667
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	218	1	379591 390000
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	379591 389667
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	218	1	379591 390000
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	0	1	379591 389667
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	218	1	379591 390000
	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	A13SW (W)	0	1	379591 389667
	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	A13SW (W)	0	1	379591 389667

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
73	Contemporary Trade Directory Entries Name: A J Smyth Location: Fairwood Rd, Manchester, M23 9JR Classification: Furniture Manufacturers - Home & Office Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A13SE (S)	117	-	379611 389448
74	Contemporary Trade Directory Entries Name: Manchester Scrap Cars Location: 18, Ferndown Road, Manchester, M23 9AQ Classification: Breakdown and Recovery Status: Inactive Positional Accuracy: Automatically positioned to the address	A13SE (E)	149	-	379868 389667
75	Contemporary Trade Directory Entries Name: Claymore Blinds Location: 249, Brooklands Road, Manchester, M23 9HF Classification: Blinds, Awnings & Canopies Status: Inactive Positional Accuracy: Automatically positioned to the address	A13NW (W)	192	-	379294 389773
76	Contemporary Trade Directory Entries Name: Brooklands Cleaning Service Location: 5, Swanage Avenue, Manchester, M23 9EN Classification: Commercial Cleaning Services Status: Active Positional Accuracy: Automatically positioned to the address	A18SE (NE)	313	-	379803 390032
77	Contemporary Trade Directory Entries Name: D & S Multiclean Location: 17, Wadebridge Avenue, Manchester, Lancashire, M23 9LS Classification: Carpet, Curtain & Upholstery Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (SE)	343	-	379865 389326
77	Contemporary Trade Directory Entries Name: S K & Associates Ltd Location: 23, Wadebridge Avenue, Manchester, M23 9LS Classification: Electrical Goods Sales, Manufacturers & Wholesalers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8NE (SE)	355	-	379896 389335
78	Contemporary Trade Directory Entries Name: J Murphy Location: 9, Arden Lodge Road, Manchester, M23 9AF Classification: Asphalt & Coated Macadam Laying Contractors Status: Inactive Positional Accuracy: Automatically positioned to the address	A14SW (E)	406	-	380086 389474
79	Contemporary Trade Directory Entries Name: T D G Uk Ltd Location: The Oaks Business Park, Crewe Road, Manchester, Greater Manchester, M23 9BE Classification: Distribution Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (E)	479	-	380175 389798
79	Contemporary Trade Directory Entries Name: Tdg (Uk) Ltd Location: The Oaks Business Park, Crewe Road, MANCHESTER, M23 9BN Classification: Distribution Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (E)	482	-	380161 389844
80	Contemporary Trade Directory Entries Name: Gilbert'S Piano Removals Location: 7, Woodlands Drive, Sale, Cheshire, M33 3PQ Classification: Road Haulage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A18SW (NW)	483	-	379360 390193
81	Contemporary Trade Directory Entries Name: Wickes Location: 456 Altrincham Road, Manchester, Greater Manchester, M23 9BL Classification: Builders' Merchants Status: Active Positional Accuracy: Automatically positioned to the address	A14SW (E)	509	-	380226 389588

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
82	Contemporary Trade Directory Entries Name: A J S Domestics Location: 11, Stubbins Close, Manchester, M23 9QD Classification: Washing Machines - Servicing & Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (NE)	560	-	380169 389985
82	Contemporary Trade Directory Entries Name: Stott Anthony Location: 11, Stubbins Close, Manchester, M23 9QD Classification: Washing Machines - Servicing & Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NW (NE)	560	-	380169 389985
83	Contemporary Trade Directory Entries Name: Blitz Cleaning Services Location: 14, Blyth Close, Timperley, Altrincham, Cheshire, WA15 7NX Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SW (S)	568	-	379550 388997
84	Contemporary Trade Directory Entries Name: Progress Interiors Location: 206, Brooklands Road, Sale, Cheshire, M33 3PH Classification: Office Furniture & Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A17SE (NW)	611	-	379035 390120
85	Contemporary Trade Directory Entries Name: Timperley Service Station Location: 304, Stockport Road, Timperley, Altrincham, WA15 7XS Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A7NE (SW)	619	-	379124 389099
85	Contemporary Trade Directory Entries Name: A S Exterior Cleaning Services Location: 302, Stockport Road, Timperley, Altrincham, Cheshire, WA15 7XS Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	627	-	379116 389096
86	Contemporary Trade Directory Entries Name: Tesco Petrol Station Location: Altrincham Road, Manchester, M23 9TJ Classification: Petrol Filling Stations Status: Active Positional Accuracy: Manually positioned to the address or location	A9NW (SE)	621	-	380201 389255
87	Contemporary Trade Directory Entries Name: Analytical Precision Products Ltd Location: Waterside Court, 1 Crewe Rd, Manchester, Lancashire, M23 9BE Classification: Scientific Apparatus & Instruments - Manufacturers Status: Inactive Positional Accuracy: Manually positioned to the address or location	A14NE (E)	622	-	380322 389806
87	Contemporary Trade Directory Entries Name: Thermoquest Location: Crewe Road, Manchester, M23 9BE Classification: Laboratory Equipment Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address	A14NE (E)	622	-	380322 389806
87	Contemporary Trade Directory Entries Name: Thermo Finnigan Location: Crewe Road, Manchester, M23 9BE Classification: Scientific Apparatus & Instruments - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address	A14NE (E)	622	-	380322 389806
87	Contemporary Trade Directory Entries Name: Thermo Mass Lab Ltd Location: Crewe Road, Manchester, M23 9BE Classification: Scientific Apparatus & Instruments - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned in the proximity of the address	A14NE (E)	622	-	380322 389806
88	Contemporary Trade Directory Entries Name: G V Instruments Ltd Location: Crewe Road, Manchester, M23 9BE Classification: Scientific Apparatus & Instruments - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	624	-	380291 389900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
88	Contemporary Trade Directory Entries Name: G V Instruments Ltd Location: Crewe Road, Manchester, M23 9BE Classification: Scientific Apparatus & Instruments - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	624	-	380291 389900
89	Contemporary Trade Directory Entries Name: Cheshire Tail Lifts Location: 8, Buxton Crescent, Sale, Cheshire, M33 3LG Classification: Commercial Vehicle Servicing, Repairs, Parts & Accessories Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	637	-	379716 390412
90	Contemporary Trade Directory Entries Name: Chem-Dry Multi Clean Location: 55, Tottenham Drive, Manchester, M23 9WH Classification: Carpet, Curtain & Upholstery Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	649	-	380041 389076
91	Contemporary Trade Directory Entries Name: Altrincham Domestics Location: 5, Sherway Drive, Timperley, Altrincham, Cheshire, WA15 7NU Classification: Domestic Appliances - Servicing, Repairs & Parts Status: Active Positional Accuracy: Automatically positioned to the address	A8SW (S)	651	-	379496 388918
92	Contemporary Trade Directory Entries Name: Cheshire Domestics Location: 16, Trafford Drive, Timperley, Altrincham, Cheshire, WA15 6EJ Classification: Washing Machines - Servicing & Repairs Status: Active Positional Accuracy: Automatically positioned to the address	A12NW (W)	686	-	378795 389829
93	Contemporary Trade Directory Entries Name: Selco Builders Warehouse Location: TIMPSON ROAD, ROUNDTORN INDUSTRIAL ESTATE, MANCHESTER, M23 9LL Classification: Refractory Materials & Supplies Status: Active Positional Accuracy: Automatically positioned to the address	A9NW (SE)	688	-	380233 389190
94	Contemporary Trade Directory Entries Name: Total Location: Altrincham Rd, Manchester, M23 9LD Classification: Petrol Filling Stations Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A14SE (E)	693	-	380360 389382
95	Contemporary Trade Directory Entries Name: D & I Tyres Location: Rear Of, 217, Park Road, Timperley, Altrincham, Cheshire, WA15 6UD Classification: Tyre Dealers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	717	-	378959 389134
95	Contemporary Trade Directory Entries Name: J & M Autos Location: 215, Park Road, Timperley, Altrincham, WA15 6UD Classification: Garage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NE (SW)	738	-	378936 389128
96	Contemporary Trade Directory Entries Name: W L G Location: Southmoor Business Park, Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9QS Classification: Freight Forwarders Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	722	-	380169 389082
97	Contemporary Trade Directory Entries Name: Tesco Stores Ltd Location: Altrincham Road, Manchester, Lancashire, M23 9TJ Classification: Petrol Filling Stations Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NE (SE)	735	-	380376 389317

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
98	Contemporary Trade Directory Entries Name: Econoclean Drive Thru Systems Ltd Location: 19, Amberwood Drive, Manchester, M23 9ND Classification: Cleaning Materials & Equipment Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	749	-	379935 388898
99	Contemporary Trade Directory Entries Name: Gates Of Cheshire Location: 62a, Heyes Lane, Timperley, Altrincham, Cheshire, WA15 6DZ Classification: Gate Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	757	-	378714 389759
100	Contemporary Trade Directory Entries Name: Pumpflow Ltd Location: Unit A1, Southmoor Business Park, Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9XS Classification: Pumps - Sales, Servicing & Repairs Status: Active Positional Accuracy: Automatically positioned to the address	A9NW (SE)	758	-	380146 389017
100	Contemporary Trade Directory Entries Name: Xpand Logistics Location: Unit A1, Southmoor Business Park, Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9XS Classification: Freight Forwarders Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	758	-	380146 389017
100	Contemporary Trade Directory Entries Name: Xpand Logistics Location: Unit A3 Southmoor Business Park, Greeba Road, Roundthorn Industrial Estate, Manchester, Greater Manchester, M23 9XS Classification: Road Haulage Services Status: Active Positional Accuracy: Manually positioned within the geographical locality	A9NW (SE)	759	-	380146 389017
100	Contemporary Trade Directory Entries Name: X-Pand Location: Unit A3, Greeba Road, Roundthorn Industrial Estate, Manchester, Greater Manchester, M23 9XS Classification: Road Haulage Services Status: Active Positional Accuracy: Manually positioned within the geographical locality	A9NW (SE)	759	-	380146 389017
100	Contemporary Trade Directory Entries Name: Birkart Globistics Ltd Location: A2-A3, Unit, Southmoor Business Pk, Greeba Rd, Roundthorn Ind Est, Manchester, M23 9RA Classification: Freight Forwarders Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NW (SE)	769	-	380140 389000
100	Contemporary Trade Directory Entries Name: Birkart Globistics Location: Claverton Rd, Roundthorn Ind Est, Manchester, Lancashire, M23 9YD Classification: Freight Forwarders Status: Inactive Positional Accuracy: Manually positioned to the address or location	A9NW (SE)	770	-	380144 389002
100	Contemporary Trade Directory Entries Name: Cm Express Ltd Location: Unit A2, Southmoor Business Park, Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9RA Classification: Road Haulage Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	779	-	380145 388991
101	Contemporary Trade Directory Entries Name: A J R Dust Engineering Ltd Location: Moorfields, 8, Moor Road, Manchester, Lancashire, M23 9BG Classification: Engineers - General Status: Inactive Positional Accuracy: Automatically positioned to the address	A14NE (E)	783	-	380418 390005
102	Contemporary Trade Directory Entries Name: La Location: Ryecroft Cottage, Shady Lane, Manchester, M23 9NN Classification: Fork Lift Trucks Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	785	-	379993 388889

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
103	Contemporary Trade Directory Entries Name: K.C Floor & Wall Tiling Location: 18, Ashbourne Crescent, Sale, Cheshire, M33 3LQ Classification: Ceramic Manufacturers, Supplies & Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NE (N)	791	-	379778 390556
104	Contemporary Trade Directory Entries Name: Ivor Grimley Location: 77, Craddock Road, Sale, Cheshire, M33 3LJ Classification: Pest & Vermin Control Status: Inactive Positional Accuracy: Automatically positioned to the address	A18NW (N)	795	-	379490 390568
105	Contemporary Trade Directory Entries Name: Keeley'S Blinds Location: 2, Marsland Avenue, Timperley, Altrincham, Cheshire, WA15 6EP Classification: Blinds, Awnings & Canopies Status: Active Positional Accuracy: Automatically positioned to the address	A12NW (W)	797	-	378681 389815
105	Contemporary Trade Directory Entries Name: D L Wilson Location: 2, Marsland Avenue, Timperley, Altrincham, Cheshire, WA15 6EP Classification: Blinds, Awnings & Canopies Status: Inactive Positional Accuracy: Automatically positioned to the address	A12NW (W)	797	-	378681 389815
106	Contemporary Trade Directory Entries Name: Wates Location: Shepherd House, Southmoor Road, Roundthorn Industrial Estate, Manchester, M23 9GH Classification: Engineers - General Status: Inactive Positional Accuracy: Automatically positioned to the address	A9NE (SE)	819	-	380460 389296
107	Contemporary Trade Directory Entries Name: Laundry Plus Location: 298, Park Road, Timperley, Altrincham, Cheshire, WA15 6UA Classification: Laundries & Launderettes Status: Active Positional Accuracy: Automatically positioned to the address	A7NW (SW)	822	-	378905 389032
108	Contemporary Trade Directory Entries Name: Johnson Cleaners (Uk) Ltd Location: 363, Stockport Road, Timperley, Altrincham, Cheshire, WA15 7UG Classification: Dry Cleaners Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NW (SW)	827	-	378910 389019
108	Contemporary Trade Directory Entries Name: P S Rook Location: 250, Stockport Road, Timperley, Altrincham, Cheshire, WA15 7UN Classification: Hardware Status: Inactive Positional Accuracy: Automatically positioned to the address	A7SE (SW)	839	-	378929 388981
108	Contemporary Trade Directory Entries Name: Keystone Castor Co Location: Unit 5a Paul House, Stockport Road, Timperley, Altrincham, Cheshire, WA15 7UQ Classification: Wheel Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NW (SW)	844	-	378894 389011
108	Contemporary Trade Directory Entries Name: Euro G S A Location: Paul House, Stockport Road, Timperley, Altrincham, Cheshire, WA15 7UQ Classification: Airfreight Services Status: Active Positional Accuracy: Automatically positioned to the address	A7NW (SW)	844	-	378894 389011
108	Contemporary Trade Directory Entries Name: Bio Laboratories Ltd Location: Suite 4A, Paul House, Stockport Rd, Timperley, Altrincham, Cheshire, WA15 7UQ Classification: Toiletries Status: Inactive Positional Accuracy: Automatically positioned to the address	A7NW (SW)	844	-	378894 389011

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
109	Contemporary Trade Directory Entries Name: Chap Domestics Location: Timperley, Altrincham, Cheshire, WA15 7XB Classification: Boilers - Servicing, Replacements & Repairs Status: Active Positional Accuracy: Manually positioned within the geographical locality	A7SE (SW)	841	-	379110 388839
110	Contemporary Trade Directory Entries Name: D S V Location: Greeba Road, Roundthorn Industrial Estate, MANCHESTER, M23 9ET Classification: Road Haulage Services Status: Active Positional Accuracy: Automatically positioned to the address	A9NE (SE)	841	-	380279 389020
111	Contemporary Trade Directory Entries Name: L & R Plastering Location: A, 12, Hayfield Walk, Timperley, Altrincham, Cheshire, WA15 7DR Classification: Cladding Suppliers & Installers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SW (S)	847	-	379468 388723
112	Contemporary Trade Directory Entries Name: Piquet Stained Glass Location: 15, Warslow Drive, Sale, Cheshire, M33 2XN Classification: Leaded Lights & Windows Status: Inactive Positional Accuracy: Automatically positioned to the address	A19NW (NE)	864	-	380215 390404
113	Contemporary Trade Directory Entries Name: S J Ball Ltd Location: 17, Fairlie Drive, Timperley, Altrincham, WA15 6EL Classification: Kitchen Furniture Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	A12NW (W)	877	-	378621 389919
114	Contemporary Trade Directory Entries Name: Altrincham Vehicle Inspections Location: 12, Adlington Close, Timperley, Altrincham, Cheshire, WA15 7EF Classification: Vehicle Inspection Services Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SE (S)	882	-	379832 388715
115	Contemporary Trade Directory Entries Name: Frans Maas (Uk) Ltd Location: Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9ET Classification: Freight Forwarders Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SE (SE)	886	-	380281 388963
116	Contemporary Trade Directory Entries Name: B E Electrical Location: 10, Swaylands Drive, Sale, Cheshire, M33 3RR Classification: Electrical Engineers Status: Inactive Positional Accuracy: Automatically positioned to the address	A17SW (NW)	895	-	378762 390240
117	Contemporary Trade Directory Entries Name: Washdays Location: 217, Woodhouse Lane East, Timperley, Altrincham, Cheshire, WA15 6AS Classification: Washing Machines - Servicing & Repairs Status: Inactive Positional Accuracy: Automatically positioned to the address	A17SW (NW)	895	-	378665 390086
118	Contemporary Trade Directory Entries Name: Shoes By Suave Location: 240a Stockport Road, Timperley, Altrincham, Cheshire, WA15 7UN Classification: Footwear Manufacturers & Wholesale Status: Active Positional Accuracy: Automatically positioned to the address	A7SW (SW)	900	-	378886 388938
118	Contemporary Trade Directory Entries Name: Wuggle Location: 234, Stockport Road, Timperley, Altrincham, Cheshire, WA15 7UN Classification: Printers Textile Status: Active Positional Accuracy: Automatically positioned to the address	A7SW (SW)	903	-	378867 388954
119	Contemporary Trade Directory Entries Name: Arriva Location: Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9ET Classification: Bus & Coach Operators & Stations Status: Inactive Positional Accuracy: Automatically positioned to the address	A9SW (SE)	907	-	380151 388840

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
119	Contemporary Trade Directory Entries Name: Dsv Road Ltd Location: Greeba Rd, Roundthorn Ind Est, Manchester, Lancashire, M23 9ET Classification: Road Haulage Services Status: Inactive Positional Accuracy: Manually positioned within the geographical locality	A9SW (SE)	907	-	380151 388840
120	Contemporary Trade Directory Entries Name: Excel Freight Management Location: Unit 1a, Greeba Rd, Roundthorn Ind Est, Manchester, M23 9ET Classification: Freight Forwarders Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A9SW (SE)	911	-	380203 388870
120	Contemporary Trade Directory Entries Name: J & A Logistics Ltd Location: Unit 2a-3a Greeba Rd, Roundthorn Ind Est, Manchester, M23 9ET Classification: Road Haulage Services Status: Inactive Positional Accuracy: Manually positioned to the road within the address or location	A9SW (SE)	918	-	380204 388862
121	Contemporary Trade Directory Entries Name: Shell Baguley Location: Altrincham Road, Baguley, Manchester, Greater Manchester, M23 9AA Classification: Petrol Filling Stations Status: Inactive Positional Accuracy: Manually positioned to the address or location	A14SE (E)	928	-	380596 389342
121	Contemporary Trade Directory Entries Name: Shell Service Station Location: Santander Atm, Shell Service Station, Altrincham Road, Manchester, M23 9AA Classification: Petrol Filling Stations Status: Active Positional Accuracy: Automatically positioned to the address	A14SE (E)	936	-	380604 389340
122	Contemporary Trade Directory Entries Name: Altrincham Car Removals Location: 49, Longfield Avenue, Timperley, Altrincham, Cheshire, WA15 7BZ Classification: Car Breakers & Dismantlers Status: Inactive Positional Accuracy: Automatically positioned to the address	A8SW (S)	932	-	379316 388661
122	Contemporary Trade Directory Entries Name: Tamiz Cleaning Services Location: 51, Longfield Avenue, Timperley, Altrincham, Cheshire, WA15 7BZ Classification: Cleaning Services - Domestic Status: Inactive Positional Accuracy: Automatically positioned to the address	A3NW (S)	941	-	379316 388652
123	Contemporary Trade Directory Entries Name: Cool Tints Location: 218a, Stockport Road, Timperley, Altrincham, WA15 7UA Classification: Window Tinting Status: Inactive Positional Accuracy: Automatically positioned to the address	A7SW (SW)	955	-	378802 388948
124	Contemporary Trade Directory Entries Name: Central Systems Location: 43, Briarfield Road, Timperley, Altrincham, Cheshire, WA15 7DG Classification: Vacuum Cleaners - Sales & Service Status: Inactive Positional Accuracy: Automatically positioned to the address	A3NW (S)	960	-	379388 388618
125	Contemporary Trade Directory Entries Name: Timpley Stove & Fuel Centre Location: 161, PARK ROAD, TIMPERLEY, ALTRINCHAM, WA15 6QZ Classification: Cookers - Sales & Service Status: Active Positional Accuracy: Automatically positioned to the address	A11SE (W)	963	-	378547 389406
125	Contemporary Trade Directory Entries Name: Timperley Pet Foods Location: 3, Heyes Lane, Timperley, Altrincham, Cheshire, WA15 6EF Classification: Pet Foods & Animal Feeds Status: Inactive Positional Accuracy: Automatically positioned to the address	A11SE (W)	974	-	378528 389429

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
126	Contemporary Trade Directory Entries Name: D R D Mechanical Services Location: 123, Kerscott Road, MANCHESTER, M23 0QE Classification: Mechanical Engineers Status: Inactive Positional Accuracy: Automatically positioned to the address	A19NE (NE)	977	-	380365 390408
127	Contemporary Trade Directory Entries Name: Re-Mech Location: Southmoor Industrial Estate, Southmoor Road, MANCHESTER, M23 9XD Classification: Precision Engineers Status: Active Positional Accuracy: Automatically positioned to the address	A9SE (SE)	991	-	380425 388951
128	Contemporary Trade Directory Entries Name: The Car Centre Location: 34, Cherry Tree Road, Manchester, M23 9BX Classification: Garage Services Status: Active Positional Accuracy: Automatically positioned to the address	A15NW (E)	1000	-	380674 389950
129	Fuel Station Entries Name: Timperley Service Station Location: 304, Stockport Road , , Altrincham, Greater Manchester, WA15 7XS Brand: OBSOLETE Premises Type: Not Applicable Status: Obsolete Positional Accuracy: Manually positioned to the address or location	A7NE (SW)	617	-	379126 389100
130	Fuel Station Entries Name: Altrincham Road Service Station Location: Altrincham Road , Wythenshawe , Manchester, Greater Manchester, M23 9LD Brand: Total Premises Type: Not Applicable Status: Obsolete Positional Accuracy: Manually positioned to the address or location	A9NW (SE)	622	-	380201 389254
130	Fuel Station Entries Name: Tesco Baguley Extra Location: Altrincham Road , Baguley , Manchester, Greater Manchester, M23 9TJ Brand: Tesco Extra Premises Type: Hypermarket Status: Open Positional Accuracy: Manually positioned to the address or location	A9NW (SE)	624	-	380204 389255
131	Fuel Station Entries Name: Shell Baguley Location: Altrincham Road , Baguley , Manchester, Greater Manchester, M23 9AA Brand: SHELL Premises Type: Petrol Station Status: Open Positional Accuracy: Manually positioned to the address or location	A14SE (E)	928	-	380596 389342
132	Points of Interest - Commercial Services Name: T D G UK Ltd Location: The Oaks Business Park, Crewe Road, Manchester, M23 9BE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14NW (E)	479	8	380175 389798
132	Points of Interest - Commercial Services Name: T D G (UK) Ltd Location: The Oaks Business Park, Crewe Road, Manchester, M23 9BN Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14NW (E)	482	8	380161 389844
133	Points of Interest - Commercial Services Name: Gilbert's Piano Removals Location: 7 Woodlands Drive, Sale, M33 3PQ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18SW (NW)	483	8	379360 390193
134	Points of Interest - Commercial Services Name: North West Car Glass Location: 11 Blyth Close, Timperley, Altrincham, WA15 7NX Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (S)	561	8	379479 389009

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
135	Points of Interest - Commercial Services Name: Timperley Service Station Location: 304 Stockport Road, Timperley, Altrincham, WA15 7XS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	619	8	379124 389099
135	Points of Interest - Commercial Services Name: Timperley Service Station Location: 304 Stockport Road, Timperley, Altrincham, WA15 7XS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	619	8	379124 389099
136	Points of Interest - Commercial Services Name: Cheshire Tail Lifts Location: 8 Buxton Crescent, Sale, M33 3LG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	637	8	379716 390412
136	Points of Interest - Commercial Services Name: Cheshire Tail Lifts Location: 8 Buxton Crescent, Sale, M33 3LG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	637	8	379716 390412
136	Points of Interest - Commercial Services Name: Cheshire Sale Lists Location: 8 Buxton Crescent, Sale, M33 3LG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	637	8	379716 390412
137	Points of Interest - Commercial Services Name: Earleyvirds Car Parking Location: 7 Kentmere Road, Timperley, Altrincham, WA15 7LW Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A8SE (S)	671	8	379803 388927
138	Points of Interest - Commercial Services Name: W L G Location: Southmoor Business Park, Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9QS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A9NW (SE)	722	8	380169 389082
138	Points of Interest - Commercial Services Name: Xpand Logistics Location: Unit A1 Southmoor Business Park, Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9XS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A9NW (SE)	758	8	380145 389017
138	Points of Interest - Commercial Services Name: Xpand Logistics Location: Unit A1 Southmoor Business Park, Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9XS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A9NW (SE)	759	8	380146 389017
139	Points of Interest - Commercial Services Name: J & M Autos Location: 215 Park Road, Timperley, Altrincham, WA15 6UD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	738	8	378936 389128
139	Points of Interest - Commercial Services Name: J & M Autos Location: 215 Park Road, Timperley, Altrincham, WA15 6UD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	739	8	378936 389128

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
140	Points of Interest - Commercial Services Name: Cheshire Valeting Services Location: 2 Bedford Court, Timperley, Altrincham, WA15 7XQ Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A7SE (SW)	755	8	379047 388986
140	Points of Interest - Commercial Services Name: Cheshire Valeting Services Location: 2 Bedford Court, Timperley, Altrincham, WA15 7XQ Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A7SE (SW)	755	8	379047 388986
141	Points of Interest - Commercial Services Name: Bermuda Forwarders Wlg Location: Unit A2-A3 Southmoor Business Park, Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9RA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A9SW (SE)	779	8	380145 388991
141	Points of Interest - Commercial Services Name: X-pand Location: Unit A3, Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9XS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A9SW (SE)	797	8	380147 388970
141	Points of Interest - Commercial Services Name: Hay World Cargo Ltd Location: Unit A3 Southmoor Business Park, Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9RA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A9SW (SE)	798	8	380147 388969
142	Points of Interest - Commercial Services Name: Coolcar Mobile Air Conditioning Location: 16 Denson Road, Timperley, Altrincham, WA15 6EB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12SW (W)	790	8	378689 389555
142	Points of Interest - Commercial Services Name: Mirror Finish Location: 4 Denson Road, Timperley, Altrincham, WA15 6EB Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A12SW (W)	821	8	378653 389580
143	Points of Interest - Commercial Services Name: A Class Valeting Location: 16 Marthall Drive, Sale, M33 2XP Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A19NW (NE)	829	8	380078 390470
143	Points of Interest - Commercial Services Name: A Class Valeting Location: 16 Marthall Drive, Sale, M33 2XP Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A19NW (NE)	829	8	380078 390470
144	Points of Interest - Commercial Services Name: Benson Transport Ltd Location: 13 Pollen Close, Sale, M33 3LS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NW (N)	834	8	379555 390614
145	Points of Interest - Commercial Services Name: D S V Location: Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9ET Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A9NE (SE)	836	8	380276 389024

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
145	Points of Interest - Commercial Services Name: Frans Maas (UK) Ltd Location: Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9ET Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A9SE (SE)	886	8	380281 388963
145	Points of Interest - Commercial Services Name: D S V Road Holding Ltd Location: Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9ET Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A9SE (SE)	886	8	380281 388963
146	Points of Interest - Commercial Services Name: Mr Patrick Toner Location: 56 Amberwood Drive, Manchester, M23 9NZ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A8SE (S)	847	8	379928 388786
147	Points of Interest - Commercial Services Name: Keystone Castor Company Location: Unit 2b Paul House, Stockport Road, Timperley, Altrincham, WA15 7UQ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7NW (SW)	856	8	378882 389007
148	Points of Interest - Commercial Services Name: Altrincham Vehicle Inspections Location: 12 Adlington Close, Timperley, Altrincham, WA15 7EF Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8SE (S)	882	8	379832 388715
149	Points of Interest - Commercial Services Name: Geomet Recycling Ltd Location: 12 Swaylands Drive, Sale, M33 3RR Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A17SW (NW)	909	8	378750 390247
150	Points of Interest - Commercial Services Name: The Car Centre Location: 34 Cherry Tree Road, Manchester, M23 9BX Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A15NW (E)	1000	8	380674 389950
151	Points of Interest - Manufacturing and Production Name: The Oaks Business Park Location: M23 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	441	8	380134 389800
152	Points of Interest - Manufacturing and Production Name: Works Location: M23 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NE (E)	608	8	380271 389906
152	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	A14NE (E)	613	8	380276 389907
153	Points of Interest - Public Infrastructure Name: Tesco Petrol Station Location: Altrincham Road Baguley Manchester, Manchester, M23 9TJ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A9NW (SE)	621	8	380201 389255
153	Points of Interest - Public Infrastructure Name: Tesco Baguley Extra Location: Altrincham Road, Baguley, Manchester, M23 9TJ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A9NW (SE)	624	8	380204 389255

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
154	Points of Interest - Public Infrastructure Name: City Centre Cruises Location: 14 Falterley Road, Manchester, M23 9BR Category: Water Class Code: Rivers and Canal Organisations and Infrastructure Positional Accuracy: Positioned to address or location	A14NE (E)	893	8	380562 389948
155	Points of Interest - Public Infrastructure Name: Arriva Location: Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9ET Category: Public Transport, Stations and Infrastructure Class Code: Bus and Coach Stations, Depots and Companies Positional Accuracy: Positioned to address or location	A9SW (SE)	907	8	380151 388840
155	Points of Interest - Public Infrastructure Name: Arriva North West Location: Greeba Road, Roundthorn Industrial Estate, Manchester, M23 9ET Category: Public Transport, Stations and Infrastructure Class Code: Bus and Coach Stations, Depots and Companies Positional Accuracy: Positioned to address or location	A9SW (SE)	907	8	380151 388840
156	Points of Interest - Public Infrastructure Name: Shell Baguley Location: Altrincham Road, Baguley, Manchester, M23 9AA Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A14SE (E)	928	8	380596 389342
156	Points of Interest - Public Infrastructure Name: Shell Service Station Location: Altrincham Road, Manchester, M23 9AA Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A14SE (E)	928	8	380596 389342
156	Points of Interest - Public Infrastructure Name: Shell Baguley Location: Altrincham Road, Manchester, Lancashire, M23 9AA Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A14SE (E)	928	8	380596 389342
156	Points of Interest - Public Infrastructure Name: Shell Baguley Location: Altrincham Road, Baguley, Manchester, Lancashire, M23 9AA Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A14SE (E)	928	8	380596 389342
157	Points of Interest - Recreational and Environmental Name: Playground Location: Chesterton Road, M23 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A13SE (SE)	201	8	379848 389494
157	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	A13SE (SE)	202	8	379851 389494
157	Points of Interest - Recreational and Environmental Name: Playground Location: Chesterton Road, M23 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A13SE (SE)	202	8	379851 389495
158	Points of Interest - Recreational and Environmental Name: Playground Location: Fairlywell Road, WA15 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	532	8	378939 389621
158	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	A12SE (W)	533	8	378939 389620

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
159	Points of Interest - Recreational and Environmental Name: Playground Location: Shaftesbury Avenue, WA15 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A8NW (S)	533	8	379354 389065
159	Points of Interest - Recreational and Environmental Name: Playground Location: Hulme Drive, WA15 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A8NW (SW)	563	8	379306 389051
160	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	A7NW (SW)	814	8	378836 389141
160	Points of Interest - Recreational and Environmental Name: Playground Location: Park Road, WA15 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A7NW (SW)	814	8	378836 389141

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices Cheshire East Council - Environmental Health Department Stockport Metropolitan Borough Council - Environment Team (Land & Water) Macclesfield Borough Council (now part of Cheshire East Council) - Health and Public Safety Environment Agency - Head Office Trafford Metropolitan Borough Council - Renewal and Environmental Protection Manchester City Council - Environmental Health Department	April 2014 December 2014 July 2008 June 2020 November 2013 September 2014	Annually Annual Rolling Update Not Applicable Annually Annual Rolling Update Annual Rolling Update
Discharge Consents Environment Agency - North West Region	April 2021	Quarterly
Enforcement and Prohibition Notices Environment Agency - North West Region	March 2013	Annual Rolling Update
Integrated Pollution Controls Environment Agency - North West Region	October 2008	Variable
Integrated Pollution Prevention And Control Environment Agency - North West Region	April 2021	Quarterly
Local Authority Integrated Pollution Prevention And Control Macclesfield Borough Council (now part of Cheshire East Council) - Environmental Health Department Stockport Metropolitan Borough Council - Environmental Health Department, EEDD Trafford Metropolitan Borough Council - Environmental Health Department Cheshire East Council - Environmental Health Department Manchester City Council - Environmental Health Department	February 2009 October 2014 October 2014 September 2014 September 2014	Not Applicable Variable Variable Variable Variable
Local Authority Pollution Prevention and Controls Macclesfield Borough Council (now part of Cheshire East Council) - Environmental Health Department Trafford Metropolitan Borough Council - Environmental Health Department Stockport Metropolitan Borough Council - Environmental Health Department, EEDD Manchester City Council - Environmental Health Department Cheshire East Council - Environmental Health Department	February 2009 July 2015 October 2014 September 2014 September 2014	Not Applicable Annual Rolling Update Annual Rolling Update Annual Rolling Update Annually
Local Authority Pollution Prevention and Control Enforcements Macclesfield Borough Council (now part of Cheshire East Council) - Environmental Health Department Stockport Metropolitan Borough Council - Environmental Health Department, EEDD Trafford Metropolitan Borough Council - Environmental Health Department Cheshire East Council - Environmental Health Department Manchester City Council - Environmental Health Department	February 2009 October 2014 October 2014 September 2014 September 2014	Not Applicable Variable Variable Variable Variable
Nearest Surface Water Feature Ordnance Survey	January 2021	
Pollution Incidents to Controlled Waters Environment Agency - North West Region	January 2000	Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - North West Region	March 2013	Annual Rolling Update
Prosecutions Relating to Controlled Waters Environment Agency - North West Region	March 2013	Annual Rolling Update
Registered Radioactive Substances Environment Agency - North West Region	June 2016	
River Quality Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points Environment Agency - Head Office	July 2012	Annually
River Quality Chemistry Sampling Points Environment Agency - Head Office	July 2012	Annually

Agency & Hydrological	Version	Update Cycle
Substantiated Pollution Incident Register Environment Agency - North West Region - South Area	January 2021	Quarterly
Water Abstractions Environment Agency - North West Region	January 2021	Quarterly
Water Industry Act Referrals Environment Agency - North West Region	October 2017	Quarterly
Groundwater Vulnerability Map Environment Agency - Head Office	June 2018	As notified
Bedrock Aquifer Designations Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations Environment Agency - Head Office	January 2018	Annually
Source Protection Zones Environment Agency - Head Office	October 2019	Quarterly
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	March 2021	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	March 2021	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	March 2021	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	March 2021	Quarterly
Flood Defences Environment Agency - Head Office	March 2021	Quarterly
OS Water Network Lines Ordnance Survey	September 2020	Quarterly
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	October 2013	Annually
Surface Water Suitability Environment Agency - Head Office	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 Environment Agency - Head Office	May 2021	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - North West Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency - North West Region - South Area	April 2021	Quarterly
Licensed Waste Management Facilities (Locations) Environment Agency - North West Region - South Area	April 2021	Quarterly
Local Authority Landfill Coverage Cheshire County Council (now part of Cheshire East Council) - Environmental Planning Department Macclesfield Borough Council (now part of Cheshire East Council) - Environmental Health Department Manchester City Council - Planning Department Stockport Metropolitan Borough Council - Environmental Health Department, EEDD Trafford Metropolitan Borough Council - Environmental Health Department	May 2000 May 2000 May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable
Local Authority Recorded Landfill Sites Cheshire County Council (now part of Cheshire East Council) - Environmental Planning Department Macclesfield Borough Council (now part of Cheshire East Council) - Environmental Health Department Manchester City Council - Planning Department Stockport Metropolitan Borough Council - Environmental Health Department, EEDD Trafford Metropolitan Borough Council - Environmental Health Department	February 2005 May 2000 May 2000 May 2000 May 2000	Not Applicable Not Applicable 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 - North West Region - South Area	March 2003	Not Applicable
Registered Waste Transfer Sites Environment Agency - North West Region - South Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency - North West Region - South 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 Trafford Metropolitan Borough Council Macclesfield Borough Council (now part of Cheshire East Council) - Planning Department Cheshire East Council - Planning Department Manchester City Council - Planning Department Stockport Metropolitan Borough Council - Environment and Economic Development Cheshire County Council (now part of Cheshire East Council) - Planning Department	April 2016 December 2008 February 2016 February 2016 February 2016 July 2008	Variable Not Applicable Variable Variable Variable Annual Rolling Update
Planning Hazardous Substance Consents Trafford Metropolitan Borough Council Macclesfield Borough Council (now part of Cheshire East Council) - Planning Department Cheshire East Council - Planning Department Manchester City Council - Planning Department Stockport Metropolitan Borough Council - Environment and Economic Development Cheshire County Council (now part of Cheshire East Council) - Planning Department	April 2016 December 2008 February 2016 February 2016 February 2016 July 2008	Variable Not Applicable Variable Variable Variable Annual Rolling Update
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 2020	Bi-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	April 2020	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	April 2021	Quarterly
Fuel Station Entries Catalist Ltd - Experian	February 2021	Quarterly
Gas Pipelines National Grid	January 2021	
Points of Interest - Commercial Services PointX	March 2021	Quarterly
Points of Interest - Education and Health PointX	March 2021	Quarterly
Points of Interest - Manufacturing and Production PointX	March 2021	Quarterly
Points of Interest - Public Infrastructure PointX	March 2021	Quarterly
Points of Interest - Recreational and Environmental PointX	March 2021	Quarterly
Underground Electrical Cables National Grid	May 2021	

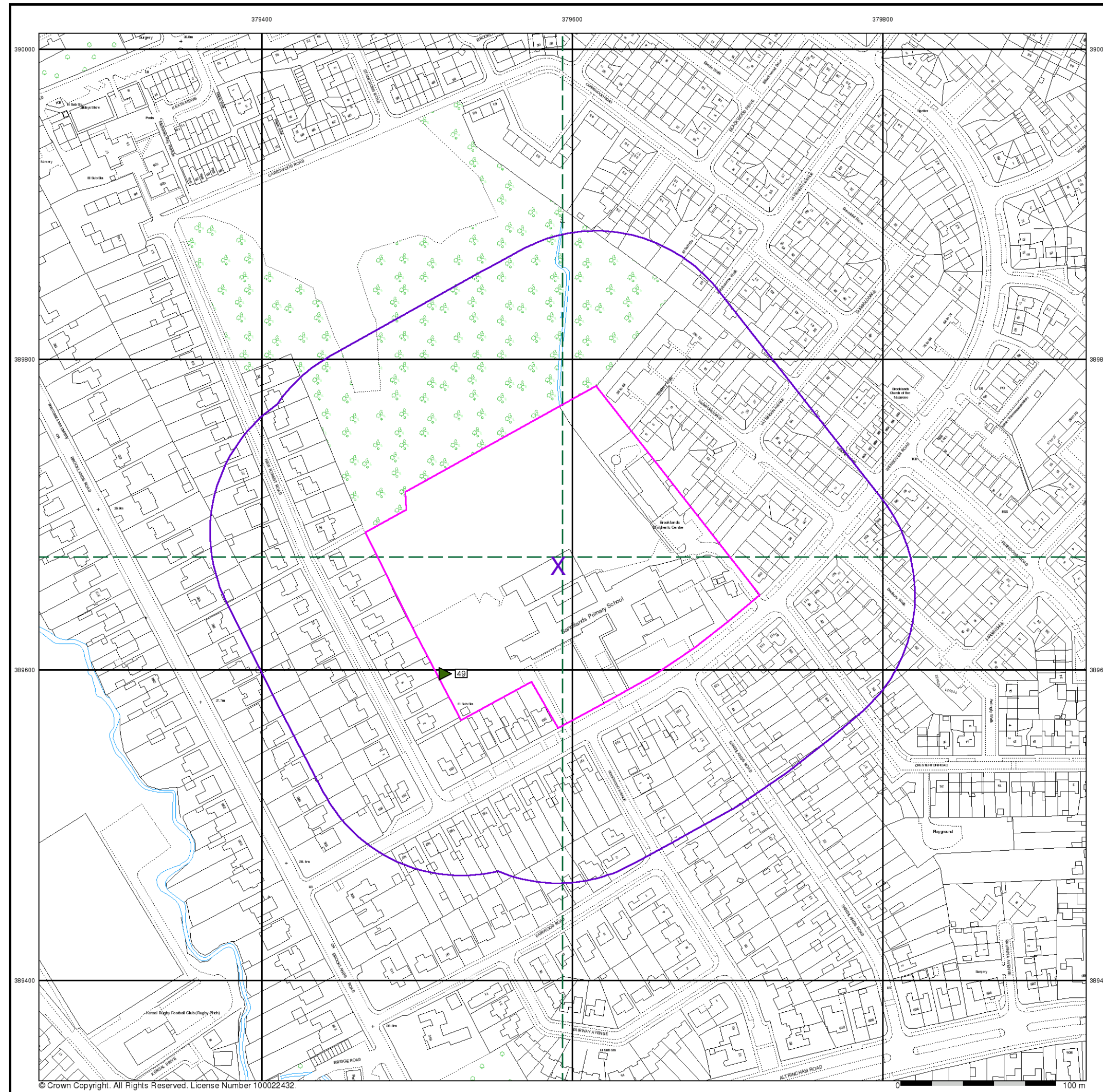
Sensitive Land Use	Version	Update Cycle
Ancient Woodland Natural England	February 2021	Bi-Annually
Areas of Adopted Green Belt Cheshire East Council - Planning Department Macclesfield Borough Council (now part of Cheshire East Council) Manchester City Council Stockport Metropolitan Borough Council Trafford Metropolitan Borough Council	June 2020 June 2020 June 2020 June 2020 June 2020	As notified As notified As notified As notified As notified
Areas of Unadopted Green Belt Cheshire East Council - Planning Department Macclesfield Borough Council (now part of Cheshire East Council) Manchester City Council Stockport Metropolitan Borough Council Trafford Metropolitan Borough Council	June 2020 June 2020 June 2020 June 2020 June 2020	As notified As notified As notified As notified As notified
Areas of Outstanding Natural Beauty Natural England	January 2021	Bi-Annually
Environmentally Sensitive Areas Natural England	January 2017	
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	February 2021	Bi-Annually
Marine Nature Reserves Natural England	July 2019	Bi-Annually
National Nature Reserves Natural England	January 2021	Bi-Annually
National Parks Natural England	April 2017	Bi-Annually
Nitrate Sensitive Areas Natural England	April 2016	Not Applicable
Nitrate Vulnerable Zones Environment Agency - Head Office Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	December 2017 October 2015	Bi-Annually
Ramsar Sites Natural England	August 2020	Bi-Annually
Sites of Special Scientific Interest Natural England	February 2021	Bi-Annually
Special Areas of Conservation Natural England	July 2020	Bi-Annually
Special Protection Areas Natural England	February 2021	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	
Stantec UK Ltd	

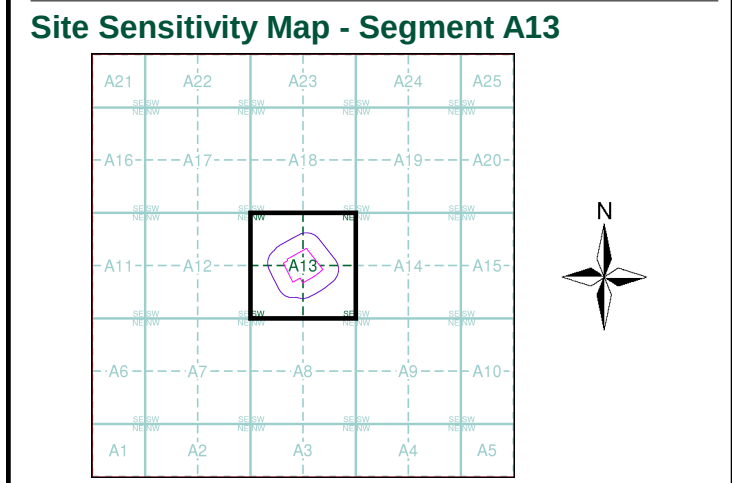
Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Manchester City Council - Environmental Health Department PO Box 463, Town Hall Extension, Albert Square, Manchester, Greater Manchester, M60 3NY	Telephone: 0161 234 4884 / 234 4873. Fax: 0161 234 4508 Website: www.manchester.gov.uk
3	Trafford Metropolitan Borough Council - Environmental Health Department P O Box 14, Trafford Town Hall, Talbot Road, Stretford, Greater Manchester, M32 0YJ	Telephone: 0161 912 4566 Fax: 0161 873 7783 Website: www.trafford.gov.uk
4	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
5	Environment Agency - Head Office Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
6	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
7	Manchester City Council - Planning Department Town Hall, Manchester, Greater Manchester, M60 2LA	Telephone: 0161 234 5000 Fax: 0161 234 4508 Website: www.manchester.gov.uk
8	PointX 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
9	Trafford Metropolitan Borough Council P O Box 14, Trafford Town Hall, Talbot Road, Stretford, Greater Manchester, M32 0YZ	Telephone: 0161 912 1212 Fax: 0161 873 7783 Website: www.trafford.gov.uk
10	Manchester City Council Town Hall, Albert Square, Manchester, Greater Manchester, M60 2JT	Telephone: 0161 234 5000 Fax: 0161 234 4508 Website: www.manchester.gov.uk
11	Natural England County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.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.



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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
- ### 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 (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

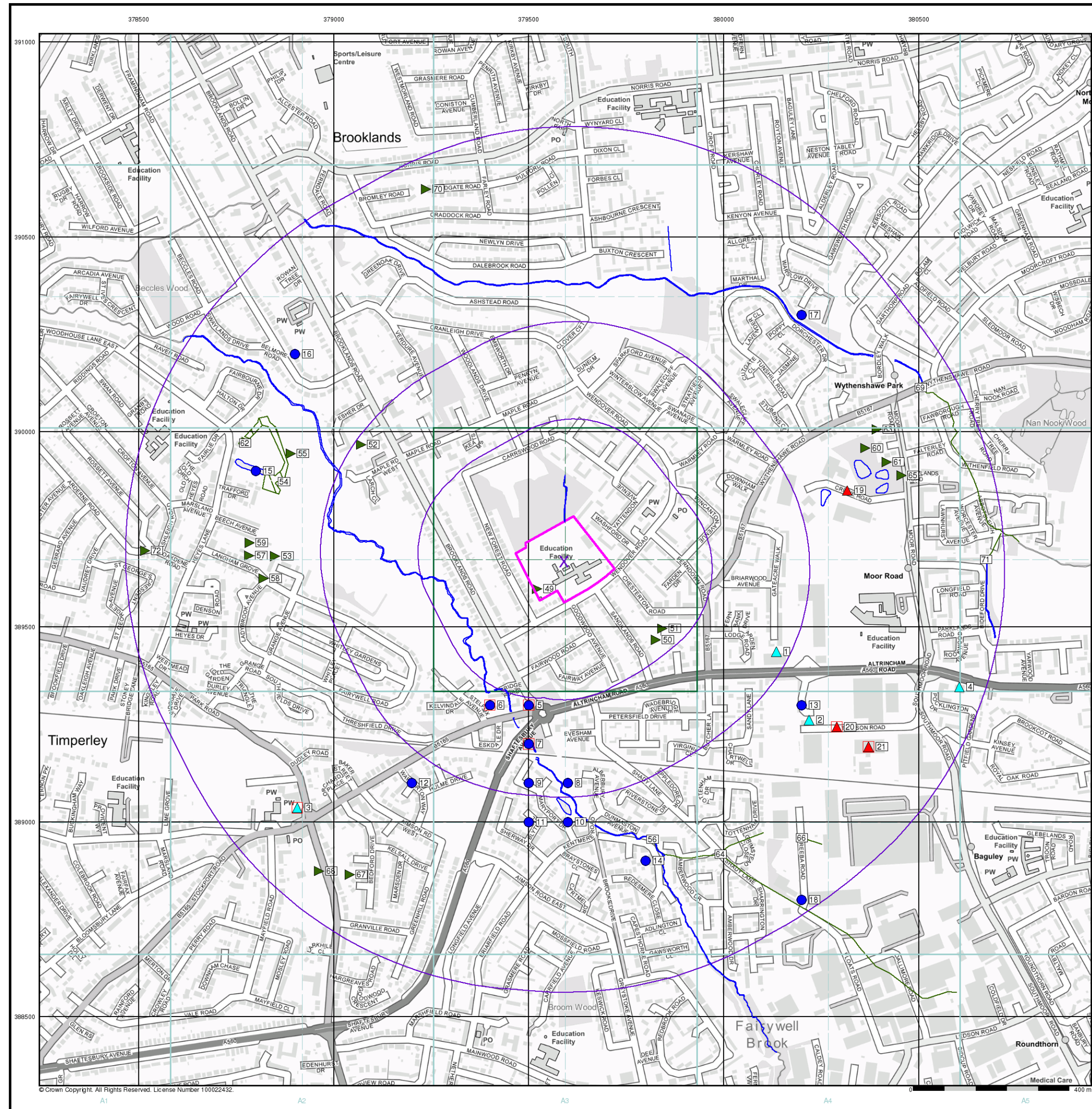


Order Details

Order Number: 279317373_1_1
Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Plot Buffer (m): 100

Site Details

Sandilands Primary School, Wendover Road, MANCHESTER, M23 9JX



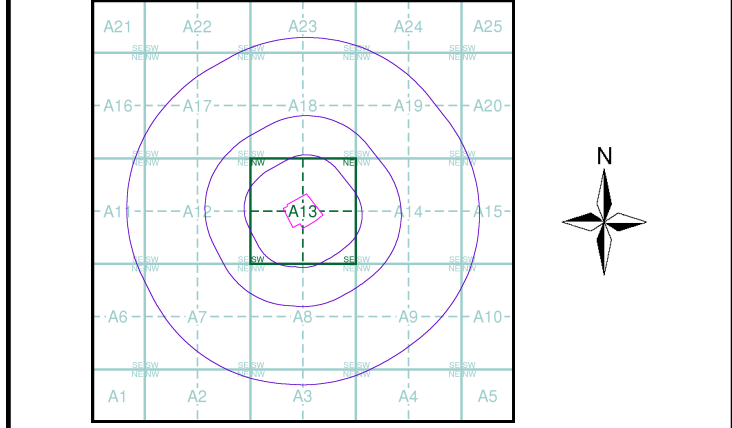
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- General**
 - Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
 - Map ID
 - Several of Type at Location
- Agency and Hydrological**
 - Contaminated Land Register Entry or Notice (Location)
 - Contaminated Land Register Entry or Notice
 - 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
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 - 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)
 - 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

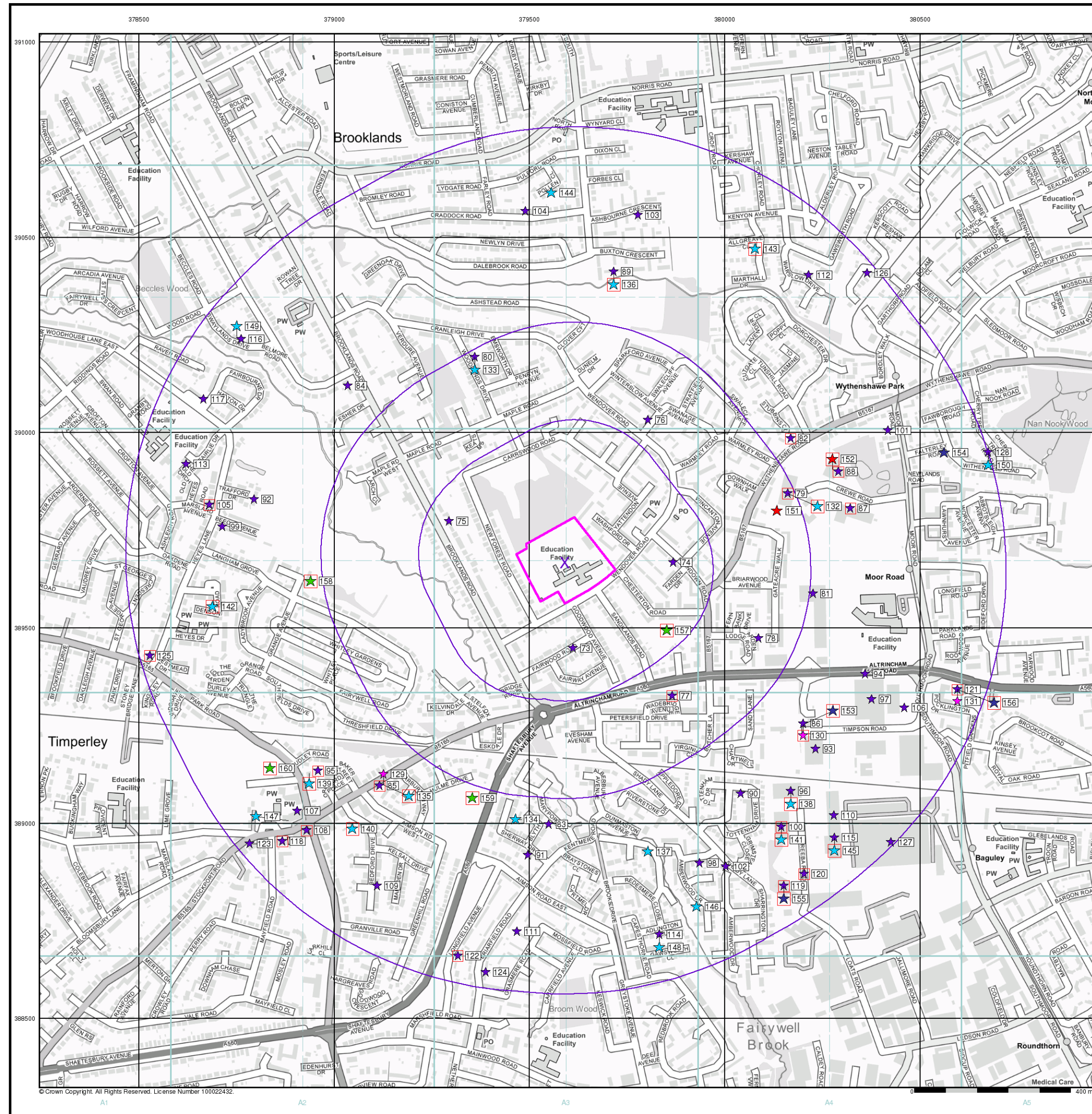
Site Sensitivity Map - Slice A



Order Details
Order Number: 279317373_1_1
Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Search Buffer (m): 1000

Site Details
Sandilands Primary School, Wendover Road, MANCHESTER, M23 9JX

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Industrial Land Use Map

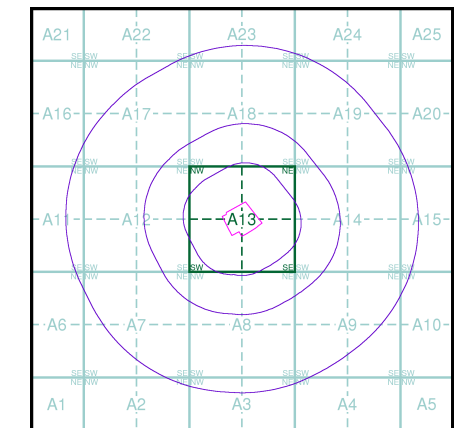
General

- 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

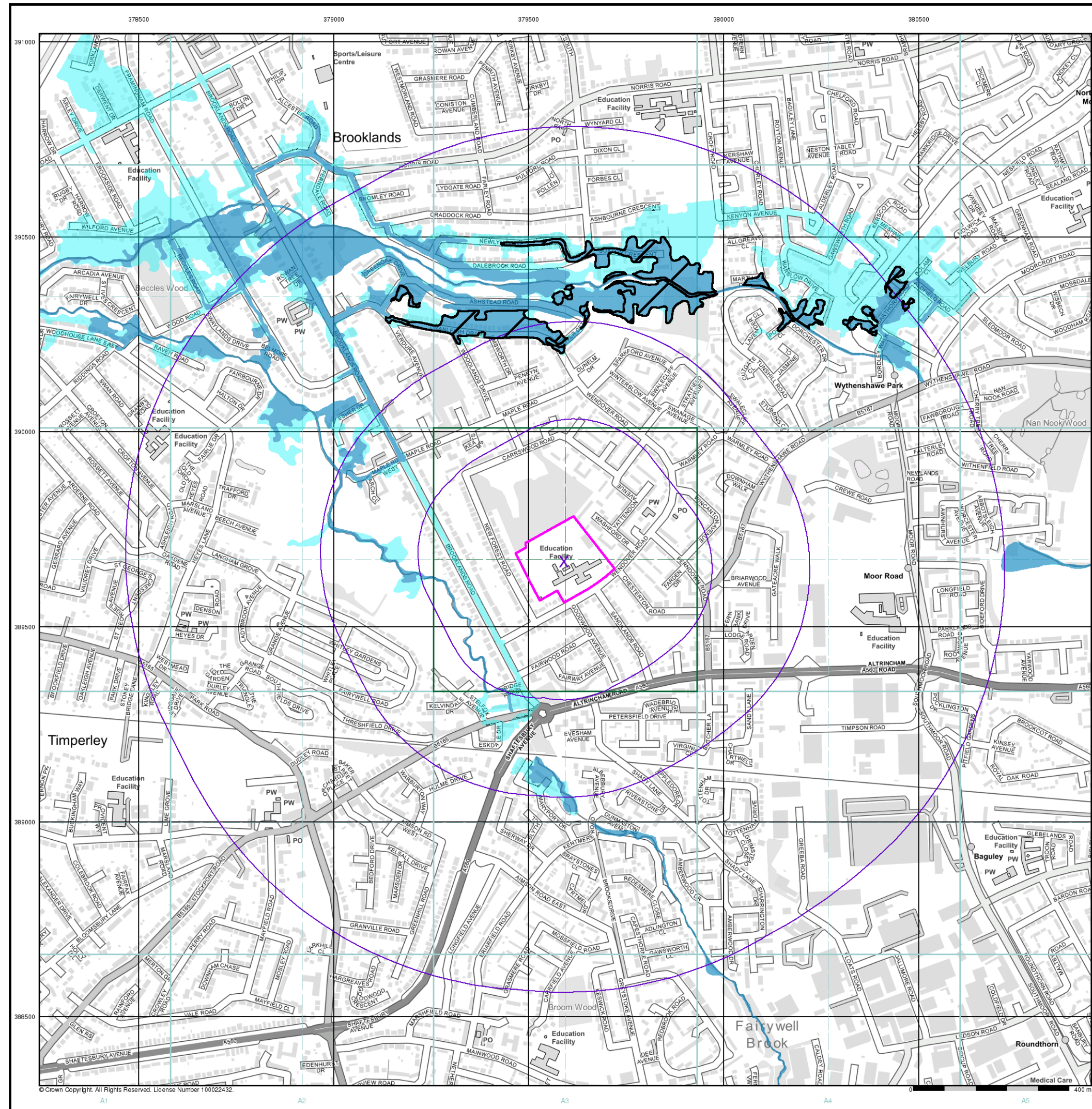
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Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Search Buffer (m): 1000

Site Details

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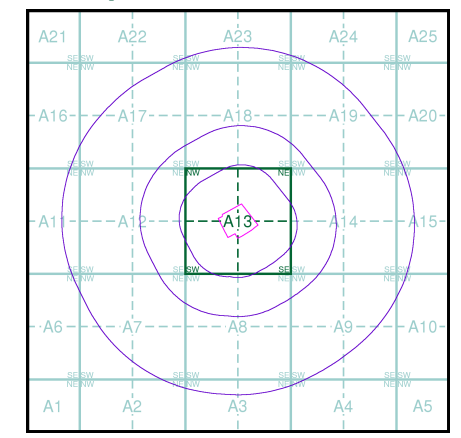
General

- 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

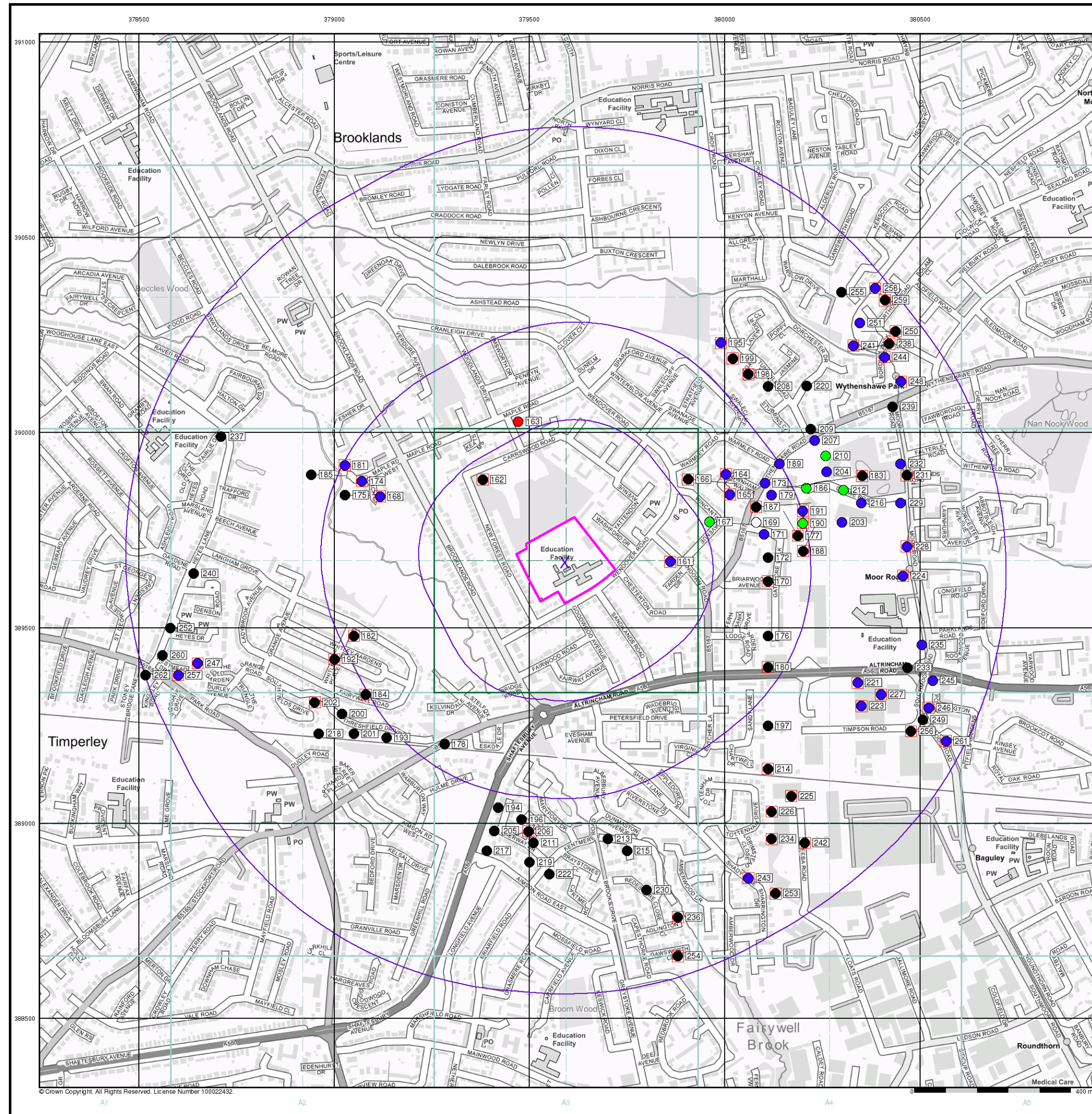
Order Number: 279317373_1_1
Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Search Buffer (m): 1000

Site Details

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General

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

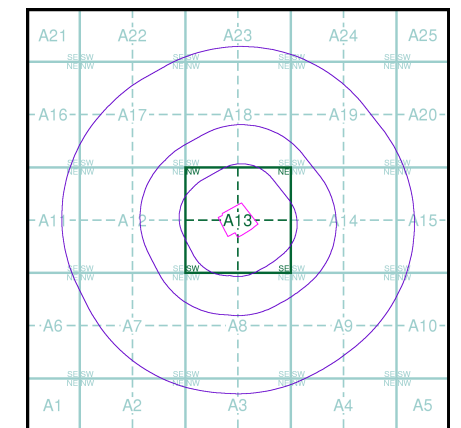
Agency and Hydrological (Boreholes)

- 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

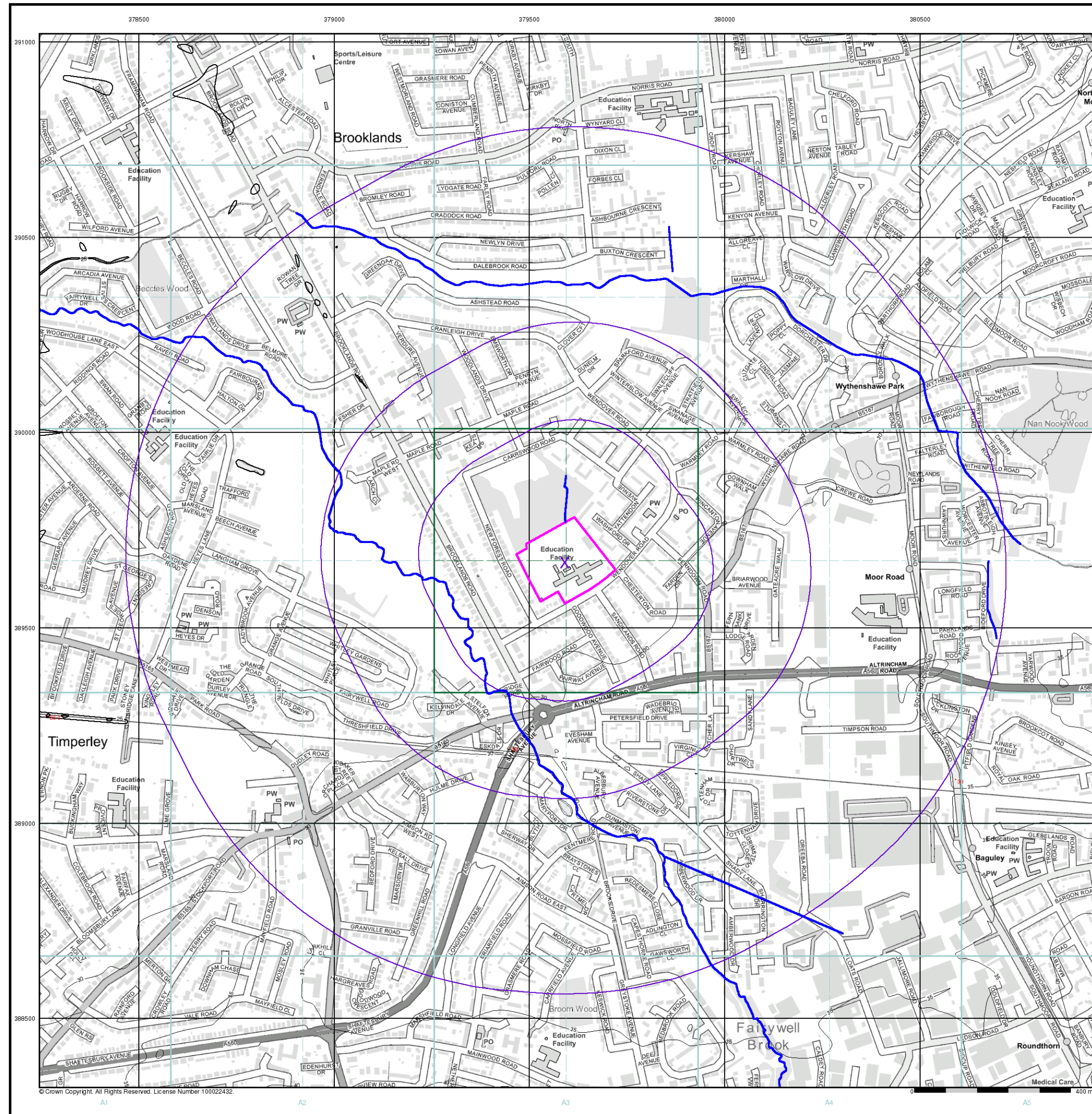
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Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Search Buffer (m): 1000

Site Details

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- Specified Buffer(s)
- Bearing Reference Point

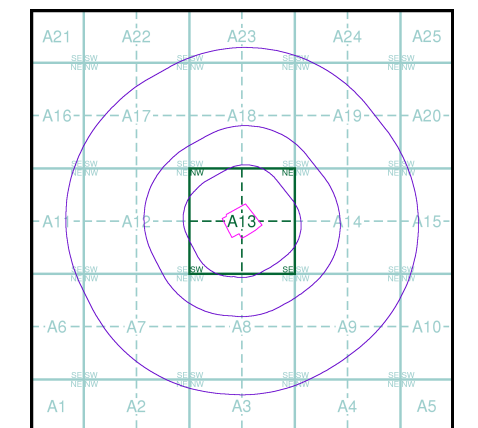
OS Water Network Data

- | | |
|--------------|-------------------------|
| 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
- Spot Height 167.3
- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



Order Details

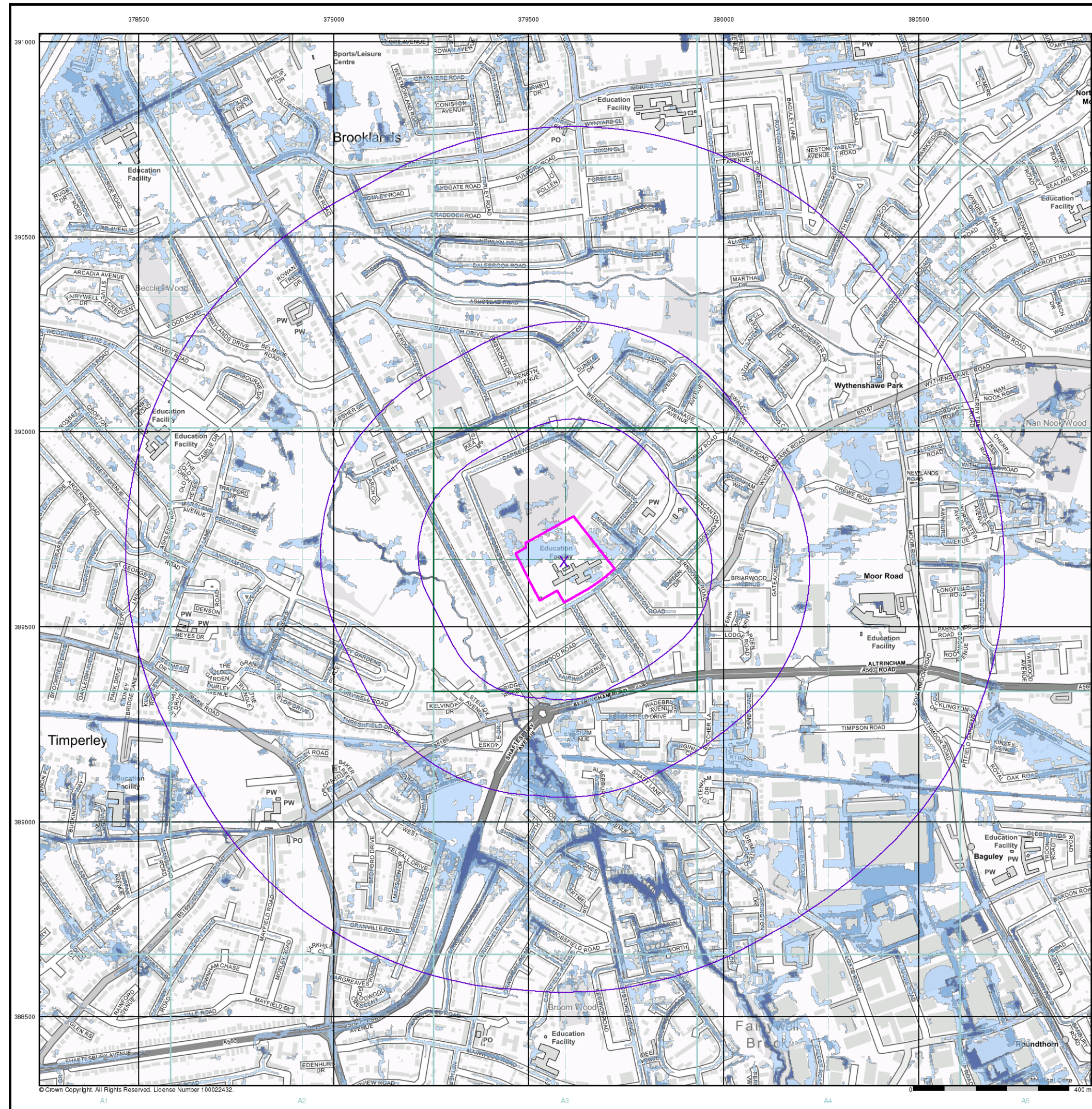
Order Number: 279317373_1_1
Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Search Buffer (m): 1000

Site Details

Sandilands Primary School, Wendover Road, MANCHESTER, M23 9JX

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General

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

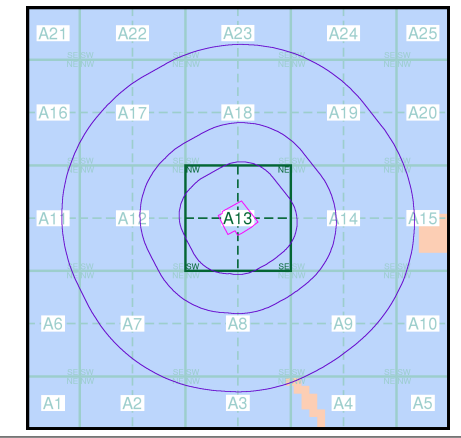
Risk of Flooding from Surface Water

- 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

EA/NRW Suitability Map - Slice A

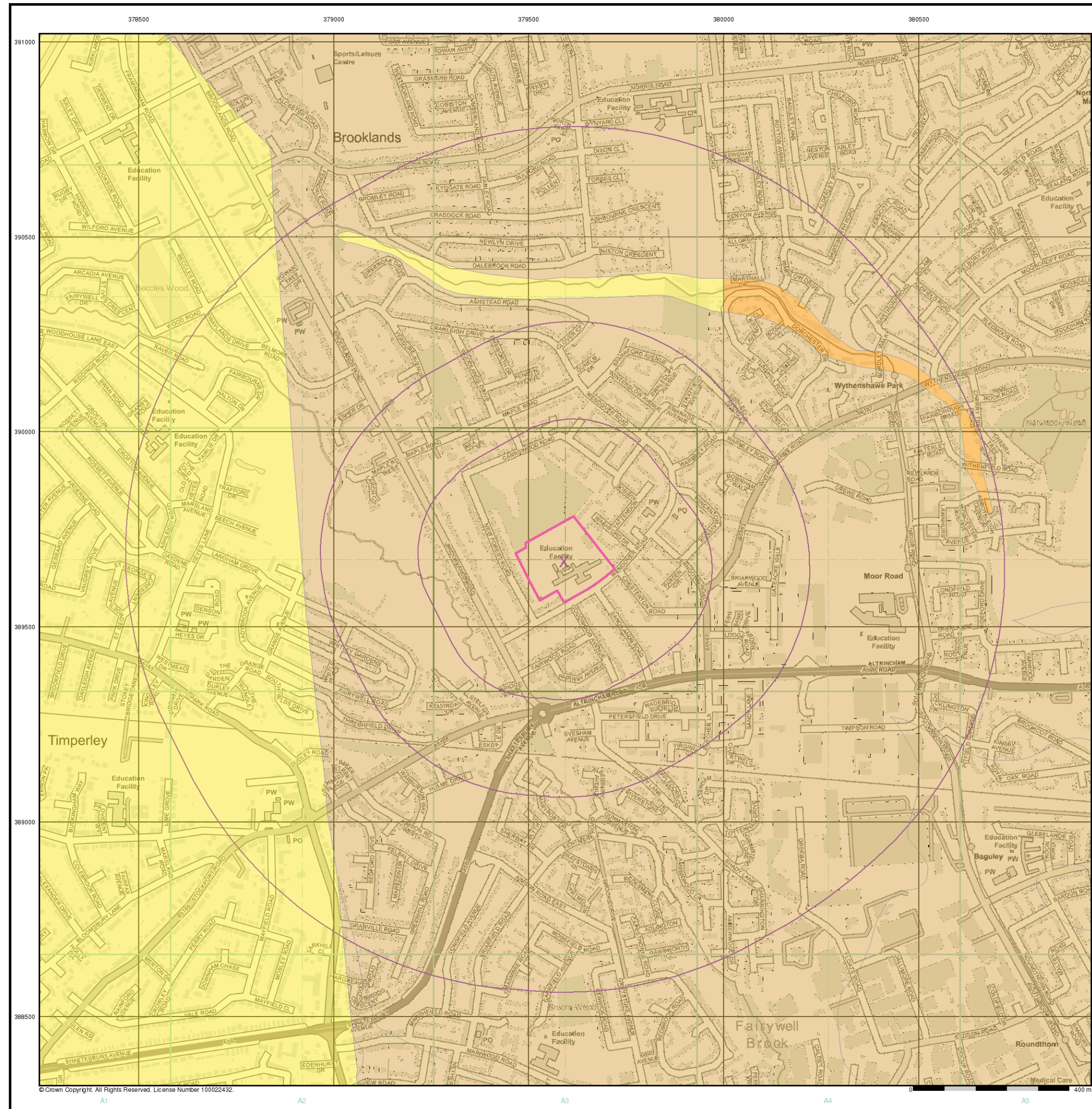


Order Details

Order Number: 279317373_1_1
Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Search Buffer (m): 1000

Site Details

Sandilands Primary School, Wendover Road, MANCHESTER, M23 9JX



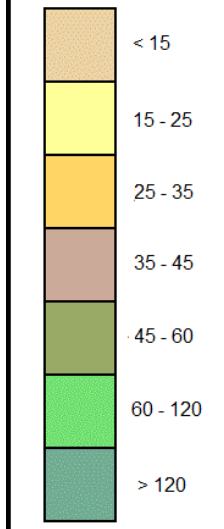
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General

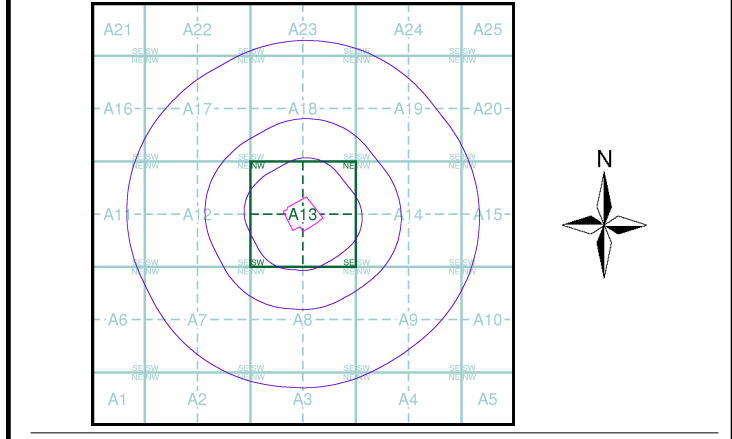
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg

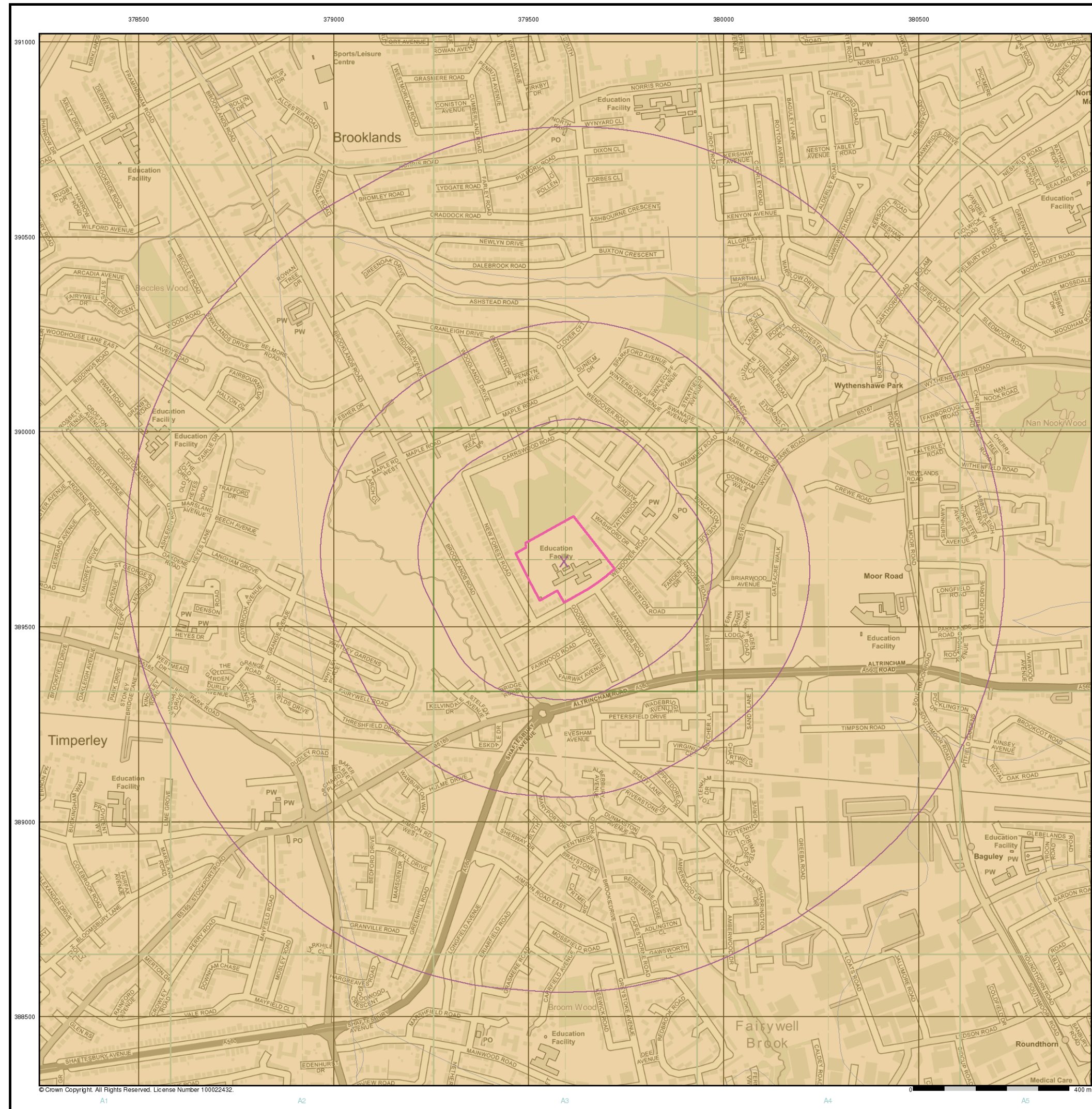


Estimated Soil Chemistry Arsenic - Slice A



Order Details
Order Details: 279317373_1_1
Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Search Buffer (m): 1000

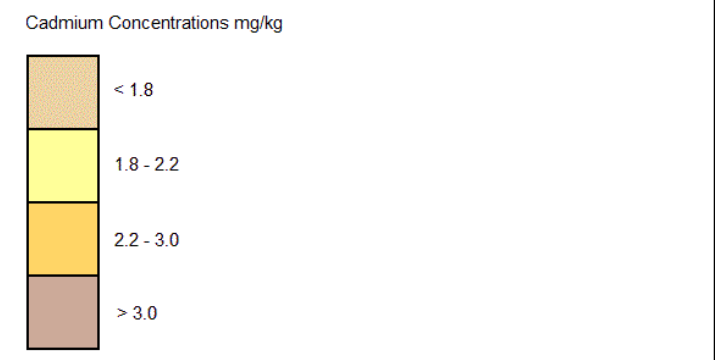
Site Details
Sandilands Primary School, Wendover Road, MANCHESTER, M23 9JX



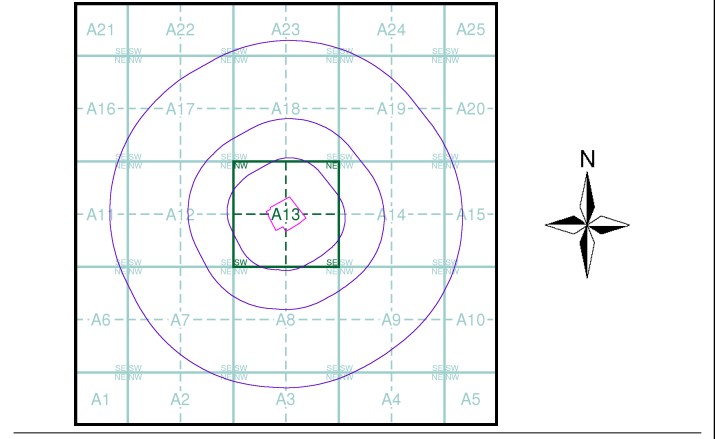
General

○ Specified Site ○ Specified Buffer(s) X Bearing Reference Point

Estimated Soil Chemistry Cadmium



Estimated Soil Chemistry Cadmium - Slice A

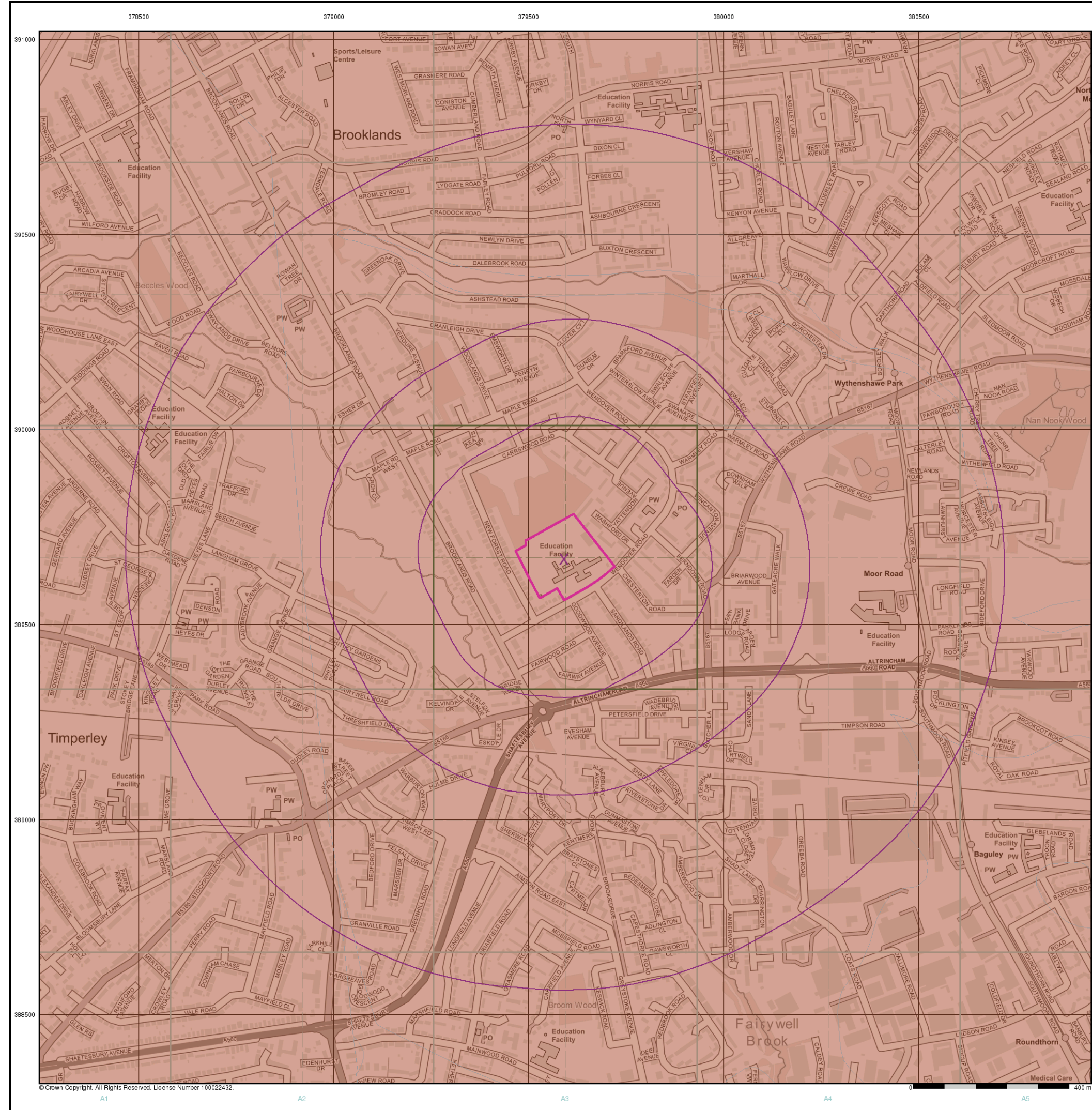


Order Details

Order Details: 279317373_1_1
Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Search Buffer (m): 1000

Site Details

Sandilands Primary School, Wendover Road, MANCHESTER, M23 9JX



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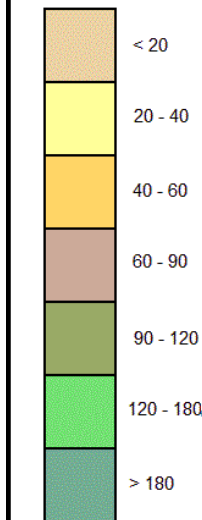
LANDMARK INFORMATION GROUP®

General

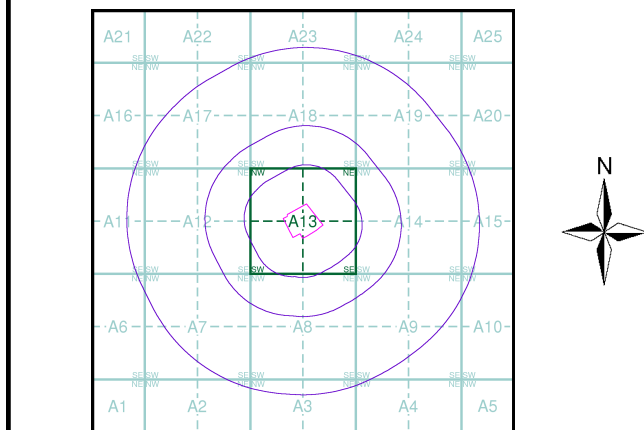
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg



Estimated Soil Chemistry Chromium - Slice A



Order Details

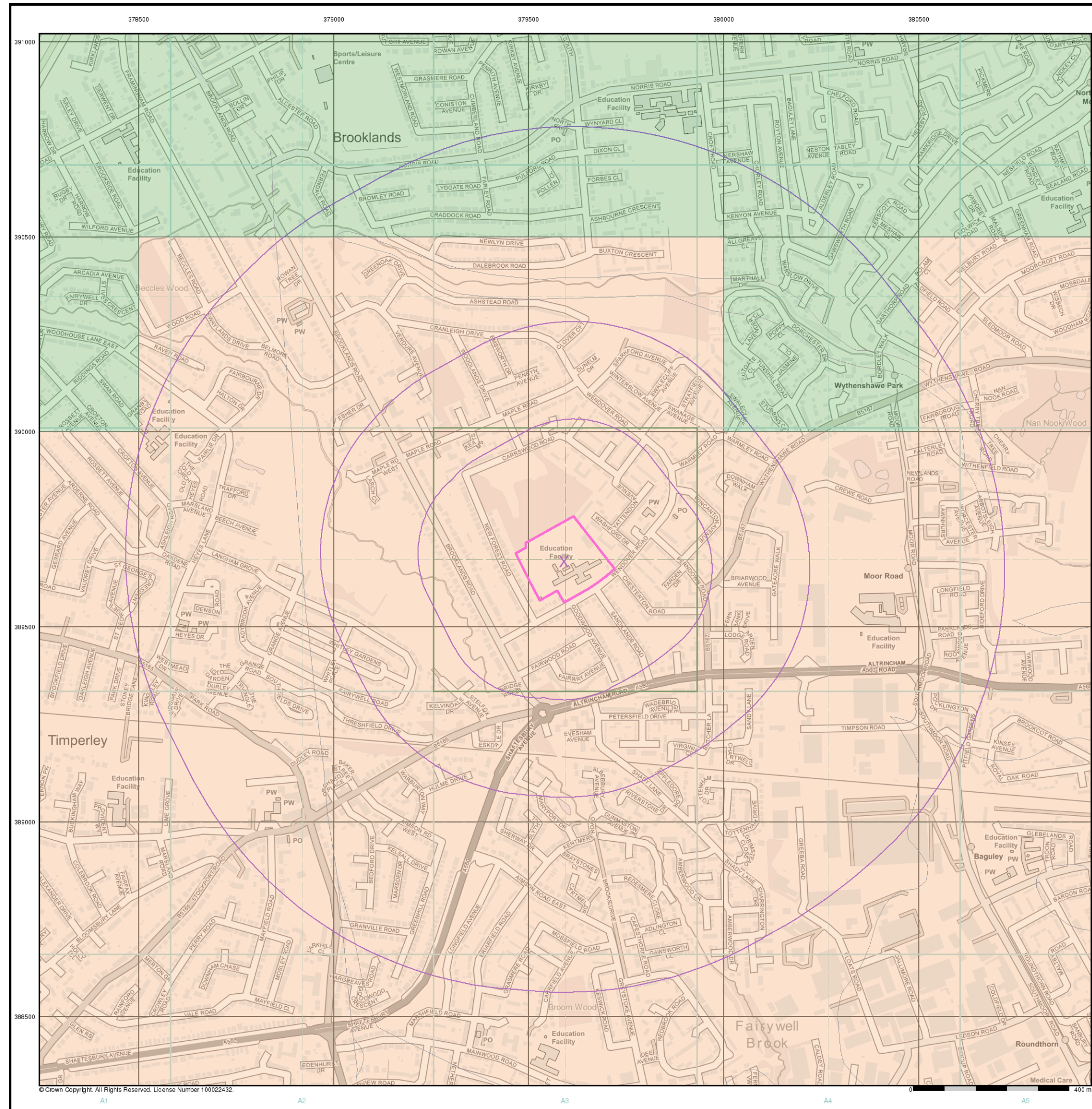
Order Details: 279317373_1_1
Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Slice: A
Site Area (Ha): 3.24
Search Buffer (m): 1000

Site Details

Sandilands Primary School, Wendover Road, MANCHESTER, M23 9JX

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Web: www.envirocheck.co.uk



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General

Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg

<100 mg/kg
100 - 200
200 - 300
300 - 600
600 - 1200
>1200

Estimated Soil Chemistry Lead - Slice A

Order Details

Order Details:	279317373_1_1
Customer Ref:	2548 TG
National Grid Reference:	379590, 389670
Slice:	A
Site Area (Ha):	3.24
Search Buffer (m):	1000

Site Details

Sandilands Primary School, Wendover Road, MANCHESTER, M23 9JX

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

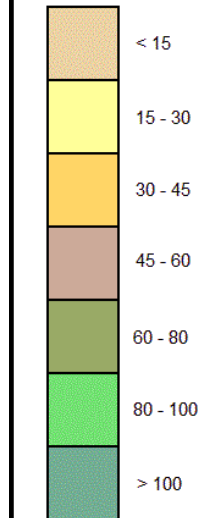
A Landmark Information Group Service v50.0 25-May-2021 Page 4 of 5

General

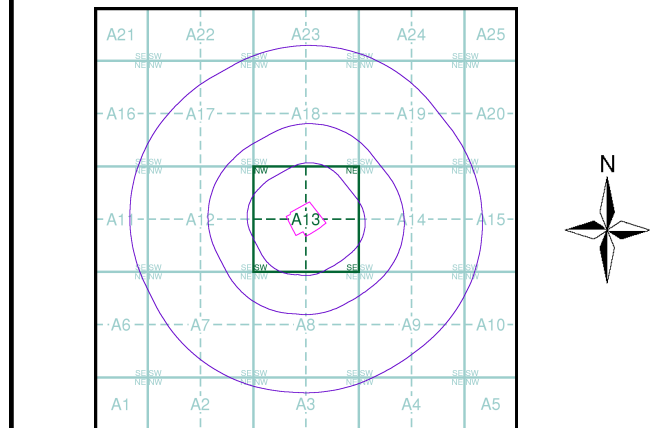
Specified Site Specified Buffer(s) Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg



Estimated Soil Chemistry Nickel - Slice A

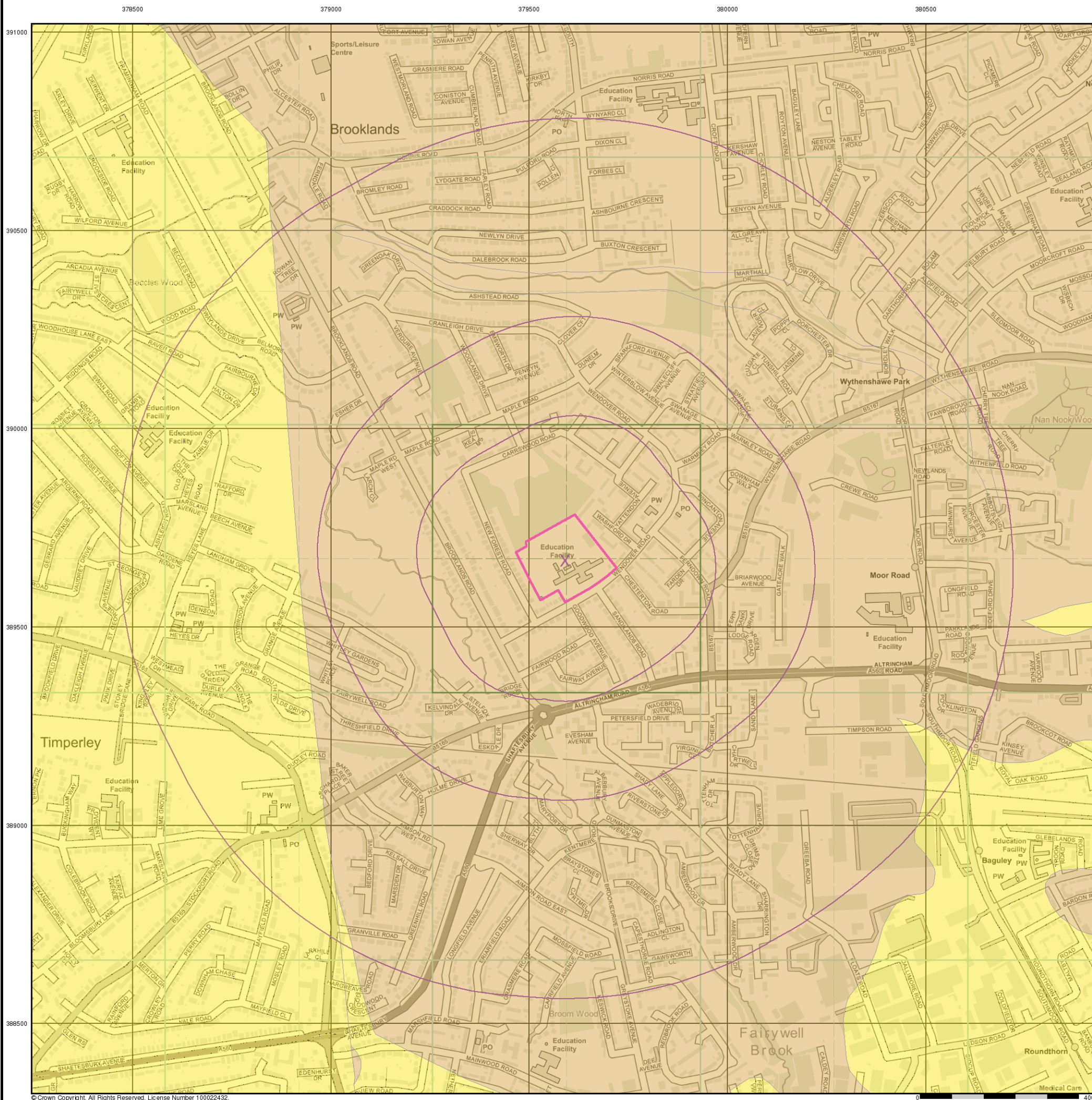


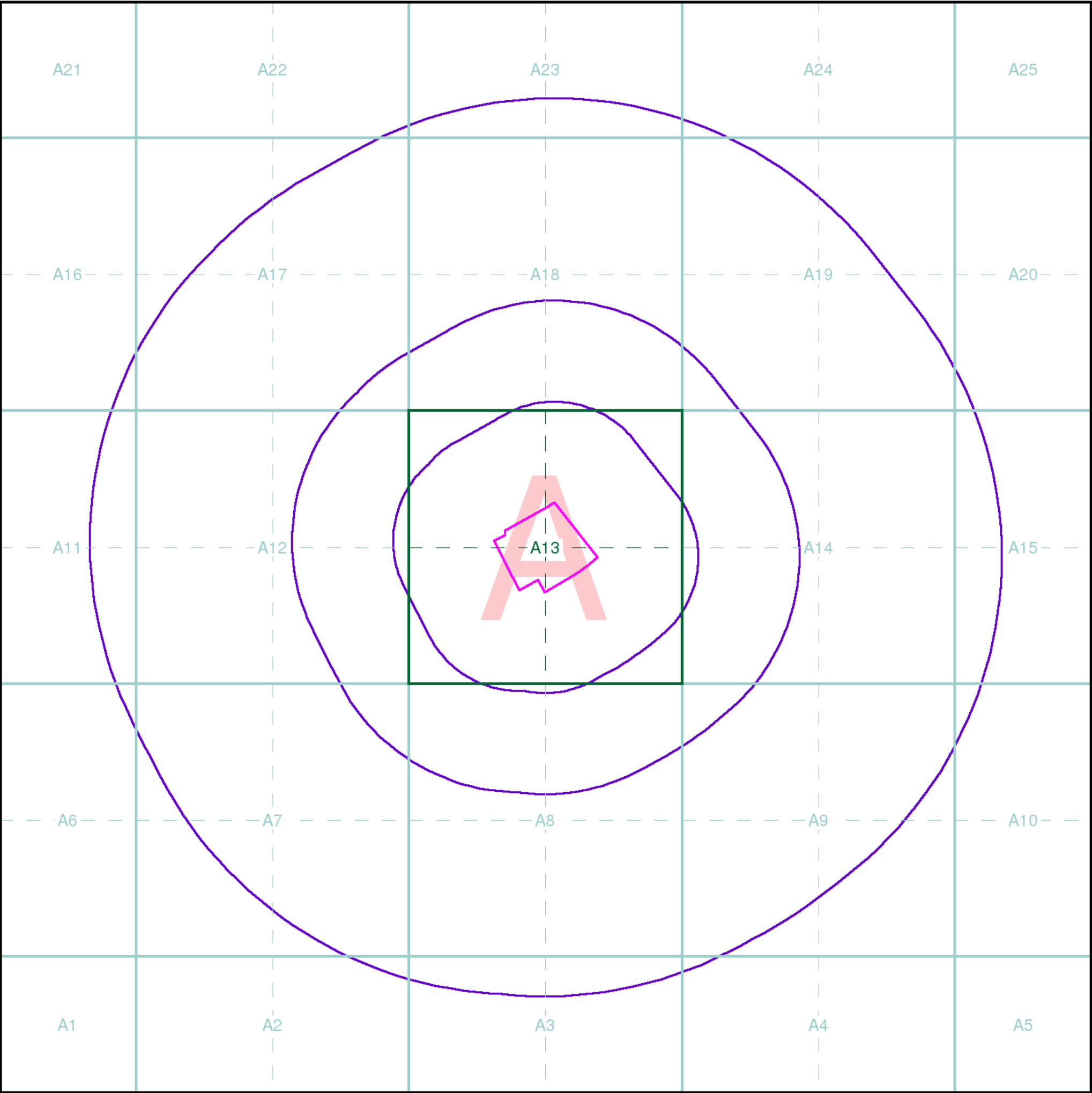
Order Details

Order Details: 279317373_1_1
 Customer Ref: 2548 TG
 National Grid Reference: 379590, 389670
 Slice: A
 Site Area (Ha): 3.24
 Search Buffer (m): 1000

Site Details

Sandilands Primary School, Wendover Road, MANCHESTER, M23 9JX





Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice

Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

Segment

A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant

A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:



Envirocheck reports are compiled from 136 different sources of data.

Order Details

Order Number: 279317373_1_1
Customer Ref: 2548 TG
National Grid Reference: 379590, 389670
Site Area (Ha): 3.24
Search Buffer (m): 1000

Site Details

Sandilands Primary School, Wendover Road, MANCHESTER, M23 9JX

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<http://www.landmarkinfo.co.uk/Terms/Show/515>

APPENDIX C:

UXO Desk Study Report

STAGE 1 PRELIMINARY UXO RISK ASSESSMENT

1ST HORIZON

The Old Pop Factory, 88-90 High Street, Dodworth, Barnsley S75 3RQ



1ST HORIZON

INTRODUCTION

The Stage 1 Preliminary Risk Assessment is an initial screening assessment designed to highlight any sources of unexploded ordnance (UXO) with the potential to contaminate a given site.

The aim of the Stage 1 assessment is to identify or discount the need for further detailed research - a Stage 2 Detailed UXO Risk Assessment.

This desktop assessment has been researched and written by a dedicated Researcher / Risk Assessor and produced in accordance with the CIRIA C681 Guidelines: 'Unexploded Ordnance, a Guide for the Construction Industry' (published in 2009).

In preparation for this assessment, original wartime records, historic OS mapping and the *UXO Sources Database* have been reviewed. The latter incorporates multiple datasets plotting the positions of a variety of domestic military sites and confirmed historic German bombing targets.

The Stage 1 Preliminary Risk Assessment considers the following:

1. The Proposed Works
2. Enemy Action during WWI and WWII
3. British / Allied Military Activity
4. Historic Site Occupancy
5. Risk Mitigating Factors

THE SITE

The Site (centred on the National Grid Ref: SJ 79567 89681) is located in Timperley, within the borough of Trafford, Greater Manchester, approximately 750m west of Moor Road railway station.

The northern section comprises a grass playing field associated with Sandilands School. The eastern section comprises a single storey day nursery and hard surfacing. The southern section comprises a large school building, a hard surfaced playground, car park and pathways, parcels of grass and other infrastructure associated with the school.

It is bound to the north by dense mature vegetation, to the east by residential properties on Washford Drive, to the south by Wendover Road and to the west by residential properties on New Forest Road.



THE PROPOSED WORKS

An SI is proposed, comprising windowless sampling to a depth of 5m bgl.

Development works comprise the construction of a single storey replacement school building. NB: the client has indicated that no further details are currently available.

ENEMY ACTION DURING WWI AND WWII

Potential Source of UXO	Significant?	Details	
WWI German Bombing	✗	No raids affected Manchester during WWI.	
WWII German Bombing	✓	British District Bombing Density Statistics	The Site is located on the border of the WWII-era County Borough of Manchester, which sustained 27 bombs / 1,000 acres, a low-to-moderate bombing density and the Municipal Borough of Altrincham, which sustained 29.1 bombs / 1,000 acres, a low-to-moderate bombing density.

		Evidence of bomb strikes / damage	No anecdotal evidence of bombing within 500m identified. No historically mapped evidence of damage within 500m identified.
		Local Bombing Decoy Sites	None within a significant distance of the Site. The closest was located approximately 4.7km south-east of the Site.
		Local German Bombing Targets	No confirmed primary Luftwaffe bombing targets in the vicinity. Anecdotal evidence suggests that Broadheath industrial estate, approximately 2.8km west of the Site, was targeted. Moor Road, Wythenshawe Park and Timperley railway stations in the Site’s wider surrounds may have been identified as targets of opportunity.
WWII German Cross Channel Artillery Shelling	✗	n/a	
BRITISH / ALLIED MILITARY ACTIVITY			
Potential Source of UXO	Significant?	Details	
WWII Home Guard (HG) activity	✗/✓	Soldiers of the 1 st and 2 nd Cheshire (Altrincham) Battalions will have been active locally during WWII. The possibility that the site was accessed by armed HG troops on patrol cannot be discounted at this stage.	
Site requisitioned for wartime military use	✗/✓	No such evidence found at this stage. However, the possibility that the Site was requisitioned for temporary wartime use cannot be ruled out entirely (e.g. tented military camp, LAA gun battery, searchlight battery, RAF barrage balloon site).	
Existing or historic Army or RAF training area / weapons range	✗	n/a	
Existing or historic military bases and other installations	✗	n/a	
Existing or historic munitions or explosives factories	✗	n/a	
Existing or historic military storage depots	✗	n/a	
Existing or historic military defensive fortifications	✗	n/a	
WWII light and / or heavy anti-aircraft (LAA and HAA) fire	✓	28 permanent HAA batteries were active within range of the Site during WWII. LAA guns likely defended vulnerable points within the city too. Luftwaffe activity in the region was relatively frequent. It is possible that an unexploded AA shell struck the Site.	
WWII pipe-mined locations and beach minefields	✗	n/a	
SITE HISTORY			
What was the Site occupancy historically, especially during WWI and WWII?	During WWII, the the Site comprised undeveloped ground. A pond was situated in the south-west.		
RISK MITIGATING FACTORS			
Post-conflict ground works	By 1956, Sandilands County Primary School had been constructed in the south of the Site. Two additional structures had been constructed in the east. By 1989, the school building had been expanded in the west. Hard surfaced ground was laid in locations throughout the southern extent of the Site; the exact date of these small scale developments is unknown. Due to the low-rise nature of the developments, the associated excavations for foundations were likely to shallow depths. No deep excavations of WWII-era soil are likely to have occurred.		

Likelihood of UXO remaining	The risk associated with (any) very shallow and shallow buried UXO will have been partially mitigated. The risk associated with (any) deep buried UXO will have almost certainly remain unmitigated.
-----------------------------	--

CONCLUSIONS

German UXO:

- Although Altrincham was never the subject of a large-scale concentrated air raid, the surrounding area experienced numerous smaller scale attacks, largely due to its vulnerable position close to Manchester which contained numerous Luftwaffe targets.
- Furthermore, anecdotal evidence suggests a Luftwaffe target was located within 3km of the Site. Therefore, it is quite possible that wayward bombs (potential UXBs) were dropped in the immediate vicinity of the Site.
- As the Site comprised open ground, any UXB strike falling on Site could have easily occurred unobserved and remained undetected, its entry hole obscured by vegetation. Any potential UXB strike to the pond could have immediately become lost beneath the waterline. This ground cover also indicates that the Site would not have been frequently accessed.
- Post-conflict ground works likely only disturbed soil to shallow depths. As such, the risk associated with (any) deep buried UXO likely largely remains unmitigated.

British / Allied UXO:

- No evidence of significant military activity specifically on Site has been found and none is likely to have occurred.
- It is quite possible that an unexploded British AA shell struck the Site during WWII and remained obscured in vegetation. Any such UXO incident could have been overlooked and remained in-situ.

RECOMMENDATION(S)

SI Works	A Stage 2 Detailed Risk Assessment is not considered necessary prior to ground works commencing. However, the possibility of shallow buried UXO remaining on Site cannot be completely ruled out at desktop stage. Therefore, a UXO Safety Awareness Briefing to all personnel conducting ground works would be considered prudent.
Development Works	A Stage 2 Detailed Risk Assessment is recommended to elucidate the risk to the proposed works.

APPENDIX D: Exploratory Hole Logs

Percussion Drilling Log



Project Name: Sandilands		Client: Department of Education		Date: 12/08/2021 - 13/08/2021	
Location: Manchester		Contractor: 1sth			
Project No. : SL01-R12		Crew Name: K, C		Drilling Equipment: Dando 2000	
Borehole Number BH01	Hole Type CP	Level 28.41m AoD	Logged By ES	Scale 1:50	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.80	27.61		Grass over soft brown sandy gravelly CLAY. Gravel is subangular to angular fine to coarse of mixed lithologies. (TOPSOIL)	
		1.20	SPT	N=13 (1,2/2,3,4,4)	1.20	27.21		Medium dense brown slightly gravelly SAND. Gravel is subangular to subrounded fine to coarse of mixed lithologies. (FLUVIOGLACIAL DEPOSITS)	1
		2.00 2.00	D SPT	N=17 (2,3/4,4,4,5)				Medium dense brown very gravelly SAND. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (FLUVIOGLACIAL DEPOSITS)	2
		3.00 3.00	D SPT	N=12 (2,2/3,3,3,3)	2.80	25.61		Firm brown gravelly slightly sandy CLAY. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (GLACIAL TILL)	3
		4.00 - 4.50 4.00	B SPT	N=14 (2,2/3,3,4,4)					4
		5.00	SPT	N=11 (2,2/2,2,3,4)					5
		6.00	SPT	N=12 (2,2/2,2,4,4)					6
		7.00	SPT	50 (25 for 20mm/50 for 15mm)	7.20	21.21		Weak brownish grey SILTSTONE. Recovered as a subangular to angular fine to coarse gravel (WEATHERED BEDROCK).	7
					7.95	20.46		End of Borehole at 7.950m	8
									9
									10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
7.95	200	7.00	200	7.30	7.95	01:30					

Remarks
Inspection pit to 1.20m. Groundwater encountered at 0.80m.

Percussion Drilling Log



Project Name: Sandilands		Client: Department of Education		Date: 13/08/2021	
Location: Manchester		Contractor: 1st			
Project No. : SL01-R12		Crew Name: K,C		Drilling Equipment: Dando 2000	
Borehole Number BH02	Hole Type CP	Level 28.37m AoD	Logged By ES	Scale 1:50	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.70	27.67		Grass over soft brown sandy gravelly CLAY. Gravel is subangular to angular fine to coarse of mixed lithologies. (TOPSOIL)	
		1.00	SPT	N=10 (1,2/2,2,3,3)				Medium dense brown very gravelly SAND. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (FLUVIOGLACIAL DEPOSITS)	1
		2.00	SPT	N=16 (2,3/3,4,4,5)					2
		2.60 - 3.00	B		2.60	25.77		Firm brown slightly sandy gravelly CLAY. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (GLACIAL TILL)	
		3.00 3.00 - 3.50 3.00	D B SPT	N=9 (1,2/2,2,2,3)					3
		4.00	SPT	N=10 (1,2/2,2,3,3)					4
		5.00	SPT	N=9 (1,2/2,2,3,2)					5
		6.00 6.00	D SPT	N=10 (2,1/2,2,3,3)					6
		7.00	SPT	N=14 (1,2/2,3,4,5)					7
		8.00	SPT	50 (25 for 50mm/50 for 15mm)	8.06	20.31		Weak brownish grey SILTSTONE. Recovered as a subangular to angular fine to coarse gravel (WEATHERED BEDROCK). End of Borehole at 8.060m	8
									9
									10

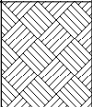
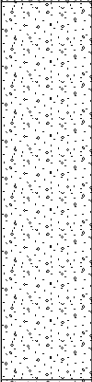
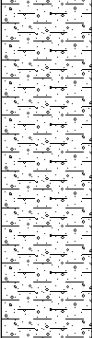
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
8.06	200	8.00	200	7.80	8.00	01:00					

Remarks
Inspection pit to 1.20m. Groundwater encountered @0.70 and 7.70m

Percussion Drilling Log



Project Name: Sandilands		Client: Department of Education		Date: 13/08/2021	
Location: Manchester		Contractor: 1sth			
Project No. : SL01-R12		Crew Name: B, Y		Drilling Equipment: Premier 110	
Borehole Number WS01	Hole Type WLS	Level 28.32m AoD	Logged By ES	Scale 1:50	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES		0.70	27.62		Soft brown sandy gravelly CLAY. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (TOPSOIL)	
		1.00	SPT	N=10 (1,2/3,2,2,3)				Medium dense brown very gravelly SAND. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (FLUVIOGLACIAL DEPOSITS)	1
		1.50	D						
		2.00	SPT	N=10 (1,2/2,2,3,3)				Firm brown slightly sandy gravelly CLAY. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (GLACIAL TILL)	2
		3.00	SPT	N=12 (2,2/3,3,3,3)					3
		3.20	D		3.20	25.12			
		4.00	SPT	N=9 (1,2/1,3,3,2)					4
		5.00	SPT	N=12 (3,3/3,3,3,3)					5
					5.45	22.87		End of Borehole at 5.450m	6
									7
									8
									9
									10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
5.45	101										

Remarks
No recovery between 4.00-5.00m. Slow groundwater infiltration @2.00m.

Percussion Drilling Log



Project Name: Sandilands		Client: Department of Education		Date: 13/08/2021	
Location: Manchester		Contractor: 1sth			
Project No. : SL01-R12		Crew Name: B, Y		Drilling Equipment: Premier 110	
Borehole Number WS02	Hole Type WLS	Level 28.33m AoD	Logged By ES	Scale 1:50	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES		0.55	27.78		Soft brown very sandy slightly gravelly CLAY. gravel is subangular to subrounded fine to coarse of mixed lithologies. (TOPSOIL)	
		1.00	SPT	N=8 (1,2/2,2,2,2)				Loose brownish grey very gravelly SAND. Gravel is rounded to subrounded fine to coarse of mixed lithologies. (FLUVIOGLACIAL DEPOSITS)	1
		1.20	D						
		2.00	SPT	N=10 (1,2/2,2,3,3)					2
		3.00	SPT	N=9 (2,1/2,3,2,2)					3
		4.00	SPT	N=8 (2,2/2,2,2,2)	3.50	24.83			4
		5.00	SPT	N=7 (1,1/1,2,2,2)	5.45	22.88		Firm brown slightly gravelly CLAY. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (GLACIAL TILL)	5
								End of Borehole at 5.450m	6
									7
									8
									9
									10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
5.45	101										

Remarks
No recovery between 4.00-5.00m. Slow groundwater infiltration @2.00m.

Percussion Drilling Log



Project Name: Sandilands		Client: Department of Education		Date: 13/08/2021	
Location: Manchester		Contractor: 1sth			
Project No. : SL01-R12		Crew Name: B, Y		Drilling Equipment: Premier 110	
Borehole Number WS03	Hole Type WLS	Level 28.23m AoD	Logged By ES	Scale 1:50	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES		0.40	27.83		Grass over loose slightly gravelly SAND. Gravel is subangular to subrounded fine to coarse of mixed lithologies. (TOPSOIL)	
		1.00	SPT	N=8 (1,2/2,2,2,2)				Loose brownish grey gravelly SAND. Gravel is subrounded to rounded fine t coarse of mixed lithologies. (FLUVIOGLACIAL DEPOSITS)	1
		2.00	SPT	N=15 (1,1/3,4,4,4)				<u>At 2.00m becomes medium dense</u>	2
		3.00	SPT	N=4 (1,1/1,1,1,1)					3
		4.00	SPT	N=8 (1,1/2,1,2,3)					4
		5.00	SPT	N=12 (3,3/3,3,3,3)				<u>At 5.00m becomes medium dense</u>	5
					5.45	22.78		End of Borehole at 5.450m	6
									7
									8
									9
									10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
5.45	101										

Remarks
No recovery between 4.00-5.00m. Groundwater resting at 1.50m.

Percussion Drilling Log



Project Name: Sandilands		Client: Department of Education		Date: 13/08/2021	
Location: Manchester		Contractor: 1sth			
Project No. : SL01-R12		Crew Name: B, Y		Drilling Equipment: Premier 110	
Borehole Number WS04	Hole Type WLS	Level 28.50m AoD	Logged By ES	Scale 1:50	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.05			0.05	28.45		Tarmac (MADE GROUND)	
		0.20			0.20	28.30		Loose grey sandy subangular to angular fine to coarse GRAVEL of asphalt. (MADE GROUND)	
		0.40	ES		0.45	28.05		Loose angular sandy COBBLES of brick. (MADE GROUND)	
		1.00	SPT	N=4 (1,1/1,1,1,1)				Loose greyish brown gravelly SAND. Gravel is subangular to subrounded fine to coarse of mixed lithologies. (FLUVIOGLACIAL DEPOSITS)	1
		1.50	D						
		2.00	SPT	N=12 (2,3/3,3,3,3)				From 2.00m becomes medium dense	2
		3.00	SPT	N=11 (1,2/2,3,3,3)					3
		3.60	D		3.50	25.00		Firm brown slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse of mixed lithologies. (FLUVIOGLACIAL DEPOSITS)	4
		4.00	SPT	N=12 (2,3/3,3,3,3)	4.30	24.20		medium dense dark brown slightly gravelly SAND. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (FLUVIOGLACIAL DEPOSITS)	5
		5.00	SPT	N=14 (2,2/3,3,4,4)	5.45	23.05		End of Borehole at 5.450m	6
									7
									8
									9
									10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
5.45	101										

Remarks
Groundwater resting @ 1.20m.

Percussion Drilling Log



Project Name: Sandilands		Client: Department of Education		Date: 16/08/2021	
Location: Manchester		Contractor: 1sth			
Project No. : SL01-R12		Crew Name: B, Y		Drilling Equipment: Premier 110	
Borehole Number WS05	Hole Type WLS	Level 28.47m AoD	Logged By ES	Scale 1:50	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES		0.65	27.82		Grass over loose brown gravelly SAND Gravel is subrounded to rounded fine to coarse of mixed lithologies. (TOPSOIL)	
		1.00	SPT	N=4 (1,1/1,1,1,1)				Loose brownish grey gravelly SAND. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (FLUVIOGLACIAL DEPOSITS)	1
		2.00	SPT	N=4 (1,1/1,1,1,1)	2.00	26.47		End of Borehole at 2.000m	2
									3
									4
									5
									6
									7
									8
									9
									10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
2.00	101										

Remarks
Hole terminated at 2.00m due to groundwater ingress and collapse.

Percussion Drilling Log



Project Name: Sandilands		Client: Department of Education		Date: 13/08/2021	
Location: Manchester		Contractor: 1sth			
Project No. : SL01-R12		Crew Name: B, Y		Drilling Equipment: Premier 110	
Borehole Number WS06	Hole Type WLS	Level 28.56m AoD	Logged By ES	Scale 1:50	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES		0.05 0.15 0.60	28.51 28.41 27.96		Tarmac (MADE GROUND)	
								Very dense black subangular to angular fine to coarse GRAVEL of asphalt. (MADE GROUND)	
		1.00	SPT	N=7 (2,2/2,1,2,2)				Medium dense brown subangular to angular fine to coarse SAND AND GRAVEL with high cobble content. Cobbles are angular of brick. (MADE GROUND)	1
		1.50	D					Loose brownish grey slightly gravelly SAND. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (FLUVIOGLACIAL DEPOSITS)	
		2.00	SPT	N=6 (2,1/1,1,2,2)					2
		3.00 3.00	D SPT	N=12 (2,3/3,3,3,3)				At 3.00m medium dense	3
		4.00	SPT	N=8 (1,2/2,2,2,2)	3.40	25.16		Soft brown slightly gravelly CLAY. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (GLACIAL TILL)	4
		5.00	SPT	N=8 (2,2/2,2,2,2)					5
					5.45	23.11		End of Borehole at 5.450m	6
									7
									8
									9
									10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
5.45	101										

Remarks

Very wet sand from 1.20m.

Percussion Drilling Log



Project Name: Sandilands		Client: Department of Education		Date: 13/08/2021	
Location: Manchester		Contractor: 1sth			
Project No. : SL01-R12		Crew Name: B, Y		Drilling Equipment: Premier 110	
Borehole Number WS07	Hole Type WLS	Level 28.52m AoD	Logged By ES	Scale 1:50	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES		0.15	28.37		Tarmac (MADE GROUND)	
					0.50	28.02		Loose greyish brown very sandy subangular to angular fine to coarse GRAVEL of asphalt and concrete. (MADE GROUND)	
		1.00	SPT	N=7 (2,2/1,2,2,2)				Loose to medium dense brown gravelly SAND. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (FLUVIOGLACIAL DEPOSITS)	1
		1.50	D						
		2.00	SPT	N=15 (2,4/3,4,4,4)				At 2.00m medium dense	2
					3.00	25.52		End of Borehole at 3.000m	3
									4
									5
									6
									7
									8
									9
									10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
3.00	101										

Remarks
No recovery between 2.0 to 3.0m. Hole terminated due to wet sands stuck in casing.

Percussion Drilling Log



Project Name: Sandilands		Client: Department of Education		Date: 13/08/2021	
Location: Manchester		Contractor: 1sth			
Project No. : SL01-R12		Crew Name: B, Y		Drilling Equipment: Premier 110	
Borehole Number WS08	Hole Type WLS	Level 28.50m AoD	Logged By ES	Scale 1:50	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES		0.05 0.10 0.15 0.40	28.45 28.40 28.35 28.10		Tarmac. (MADE GROUND)	
		1.00	SPT	N=7 (1,1/1,2,2,2)				Dense grey subangular to angular fine to coarse GRAVEL of Asphalt. (MADE GROUND)	
		1.50	D					Tarmac. (MADE GROUND)	1
		1.50	ES		1.20	27.30		Dense reddish brown subangular to angular fine to coarse GRAVEL of brick with medium cobble content. Cobbles are angular of brick. (MADE GROUND)	
		2.00	SPT	N=4 (2,2/1,1,1,1)				Loose brown very gravelly SAND. Gravel is subangular to angular fine to coarse of brick and concrete with occasional glass. (MADE GROUND)	2
		2.50	D					Loose brown ashy gravelly SAND. Gravel is subangular to angular fine to coarse of mixed lithologies. (MADE GROUND)	
		2.50	ES						
		3.00	SPT	N=4 (1,1/1,1,1,1)				<i>Oil sheen on wet sand between 2.00 and 3.70m.</i>	3
					3.70	24.80		Soft black sandy gravelly CLAY. Gravel is subangular of mixed lithologies. (MADE GROUND)	4
		4.00	SPT	N=4 (1,1/1,1,1,1)					
					4.70	23.80		Soft brown slightly gravelly CLAY. Gravel is subrounded to rounded fine to coarse of mixed lithologies. (GLACIAL TILL)	5
		5.00	SPT	N=4 (1,1/1,1,1,1)					
					5.45	23.05		End of Borehole at 5.450m	6
									7
									8
									9
									10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
5.45	101										

Remarks

APPENDIX E:

Dynamic Cone Penetrometer Records

DYNAMIC CONE PENETROMETER TEST REPORT

Project: SL01-R12

Project name: Sandilands

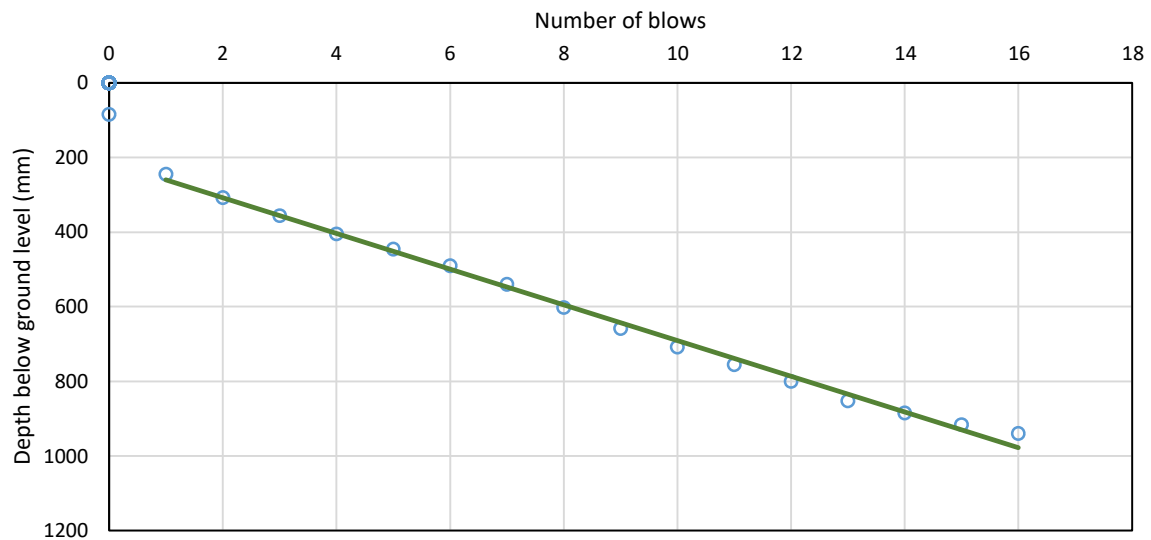
Report date: 13/08/2021

Operator: BE

Notes:

Test date: 10/08/2021

Test location: DCP1



Layer 245-940mm bgl

50th Percentile penetration rate

24 mm/blow

Estimated CBR

10.5 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

79.2 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

124.6 kPa

[PCA - Design of Concrete Pavement. 1955]

Produced by	Dated	Checked by	Dated
ES	10/08/21	SF	28/09/21

DYNAMIC CONE PENETROMETER TEST REPORT

Project: SL01-R12

Project name: Sandilands

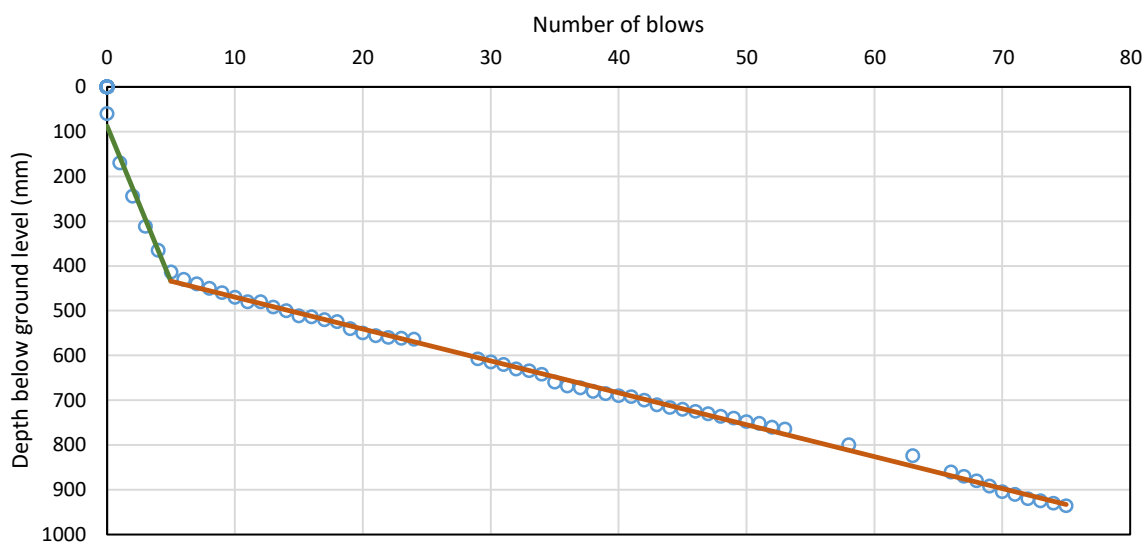
Report date: 13/08/2021

Operator: BE

Notes:

Test date: 10/08/2021

Test location: DCP2



Layer 60-414mm bgl

50th Percentile penetration rate

35 mm/blow

Estimated CBR

7.0 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

61.3 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

95.6 kPa

[PCA - Design of Concrete Pavement. 1955]

Layer 414-936mm bgl

50th Percentile penetration rate

4 mm/blow

Estimated CBR

69.8 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

266.0 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

438.3 kPa

[PCA - Design of Concrete Pavement. 1955]

Produced by	Dated	Checked by	Dated
ES	10/08/21	SF	28/09/21

DYNAMIC CONE PENETROMETER TEST REPORT

Project: SL01-R12

Project name: Sandilands

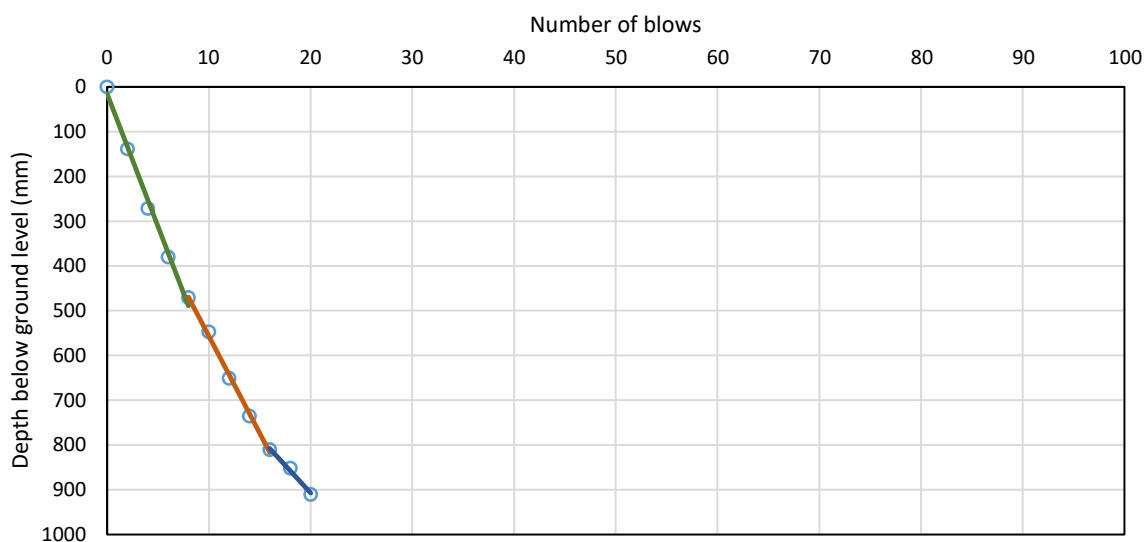
Report date: 13/08/2021

Operator: ES

Notes: Test started in grass

Test date: 13/08/2021

Test location: BH02



Layer 0-471mm bgl

50th Percentile penetration rate

30 mm/blow

Estimated CBR

8.3 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

68.1 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

106.6 kPa

[PCA - Design of Concrete Pavement. 1955]

Layer 471-810mm bgl

50th Percentile penetration rate

22 mm/blow

Estimated CBR

11.5 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

84.0 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

132.5 kPa

[PCA - Design of Concrete Pavement. 1955]

Layer 810-910mm bgl

50th Percentile penetration rate

13 mm/blow

Estimated CBR

20.1 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

119.9 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

191.7 kPa

[PCA - Design of Concrete Pavement. 1955]

Produced by	Dated	Checked by	Dated
ES	13/08/21	SF	30/09/21

DYNAMIC CONE PENETROMETER TEST REPORT

Project: SL01-R12

Project name: Sandilands

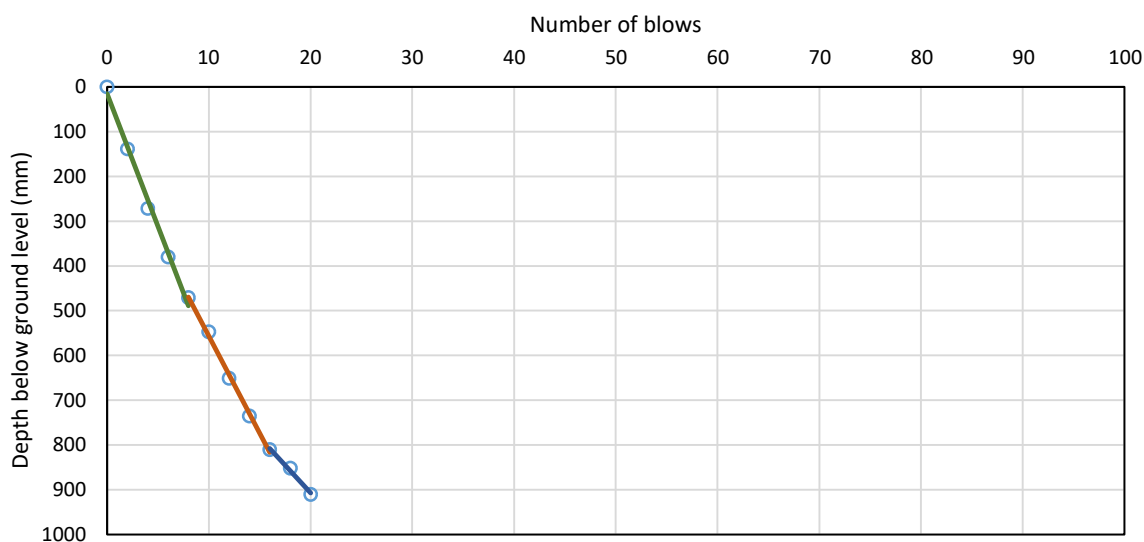
Report date: 13/08/2021

Operator: ES

Notes: Test started in grass

Test date: 13/08/2021

Test location: BH02



Layer 0-471mm bgl

50th Percentile penetration rate

30 mm/blow

Estimated CBR

8.3 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

68.1 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

106.6 kPa

[PCA - Design of Concrete Pavement. 1955]

Layer 471-810mm bgl

50th Percentile penetration rate

22 mm/blow

Estimated CBR

11.5 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

84.0 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

132.5 kPa

[PCA - Design of Concrete Pavement. 1955]

Layer 810-910mm bgl

50th Percentile penetration rate

13 mm/blow

Estimated CBR

20.1 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

119.9 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

191.7 kPa

[PCA - Design of Concrete Pavement. 1955]

Produced by	Dated	Checked by	Dated
ES	13/08/21	SF	30/09/21

DYNAMIC CONE PENETROMETER TEST REPORT

Project: SL01-R12

Project name: Sandilands

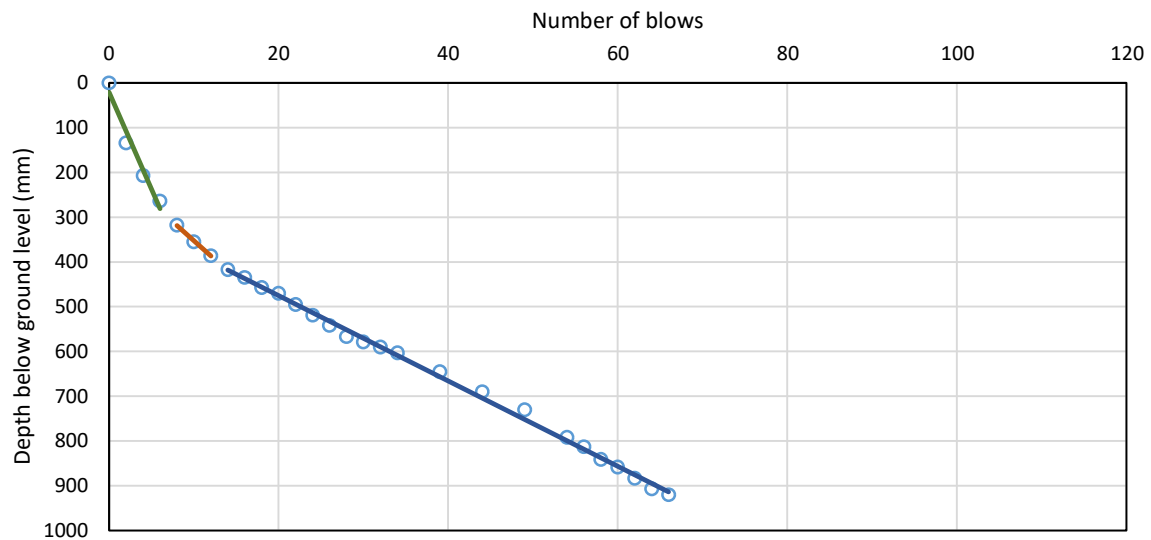
Report date: 13/08/2021

Operator: ES

Notes: Test started in grass

Test date: 13/08/2021

Test location: WS01



Layer 0-280mm bgl

50th Percentile penetration rate

22 mm/blow

Estimated CBR

11.5 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

84.0 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

132.5 kPa

[PCA - Design of Concrete Pavement. 1955]

Layer 280-400mm bgl

50th Percentile penetration rate

9 mm/blow

Estimated CBR

29.6 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

153.7 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

248.1 kPa

[PCA - Design of Concrete Pavement. 1955]

Layer 400-960mm bgl

50th Percentile penetration rate

5 mm/blow

Estimated CBR

55.1 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

228.8 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

374.8 kPa

[PCA - Design of Concrete Pavement. 1955]

Produced by	Dated	Checked by	Dated
ES	13/08/21	SF	30/09/21

DYNAMIC CONE PENETROMETER TEST REPORT

Project: SL01-R12

Project name: Sandilands

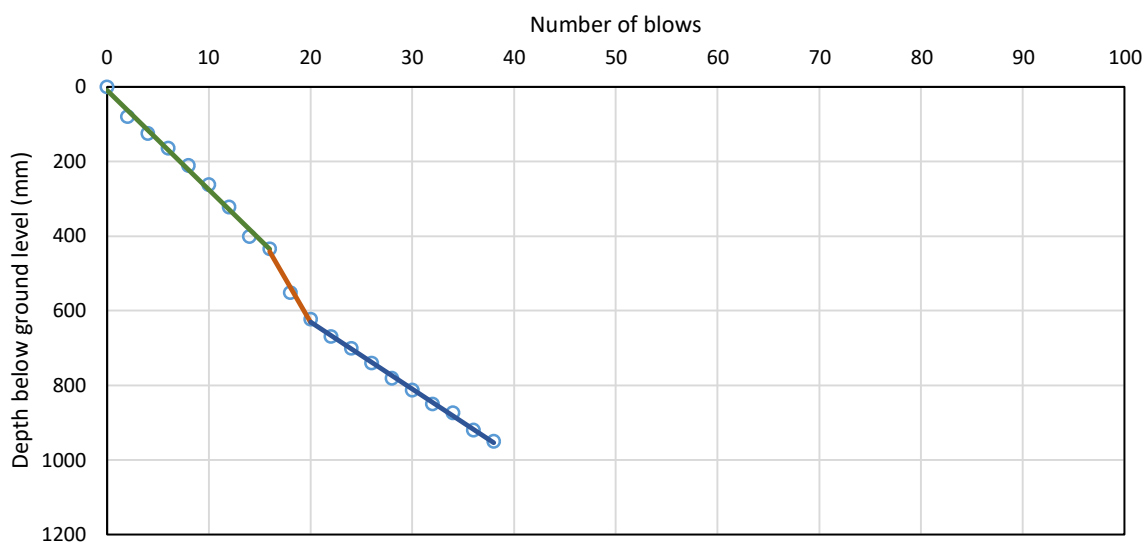
Report date: 13/08/2021

Operator: BE

Notes: Test started in grass

Test date: 13/08/2021

Test location: WS02



Layer 0-434mm bgl

50th Percentile penetration rate

14 mm/blow

Estimated CBR

18.6 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

114.0 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

181.9 kPa

[PCA - Design of Concrete Pavement. 1955]

Layer 434-623mm bgl

50th Percentile penetration rate

24 mm/blow

Estimated CBR

10.5 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

79.2 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

124.6 kPa

[PCA - Design of Concrete Pavement. 1955]

Layer 623-950mm bgl

50th Percentile penetration rate

9 mm/blow

Estimated CBR

29.6 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

153.7 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

248.1 kPa

[PCA - Design of Concrete Pavement. 1955]

Produced by	Dated	Checked by	Dated
ES	13/08/21	SF	30/09/21

DYNAMIC CONE PENETROMETER TEST REPORT

Project: SL01-R12

Project name: Sandilands

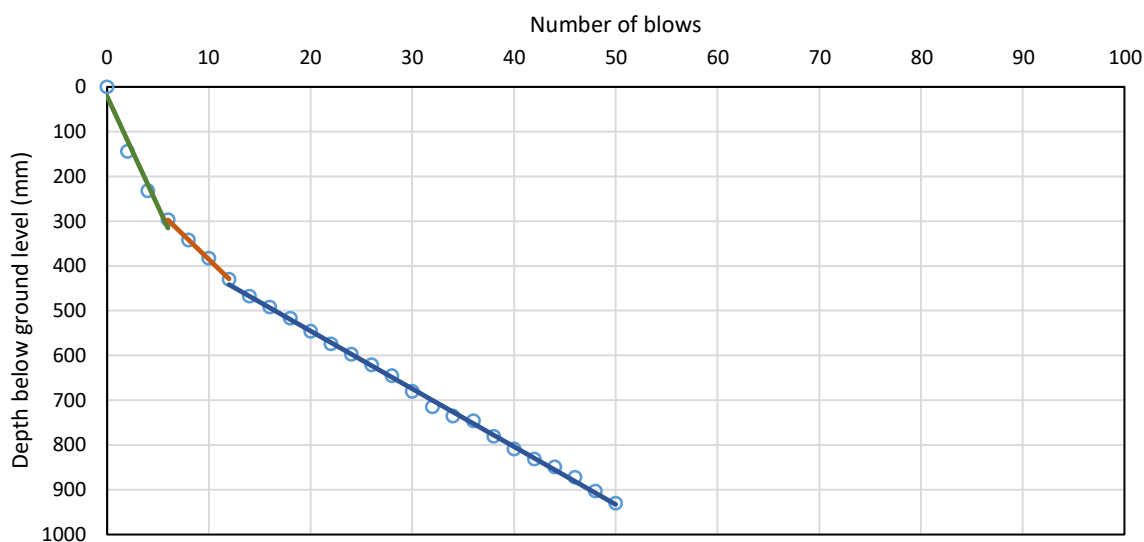
Report date: 13/08/2021

Operator: ES

Notes: Test started in grass

Test date: 13/08/2021

Test location: WS03



Layer 0-297mm bgl

50th Percentile penetration rate

25 mm/blow

Estimated CBR

10.1 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

77.0 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

121.1 kPa

[PCA - Design of Concrete Pavement. 1955]

Layer 297-430mm bgl

50th Percentile penetration rate

11 mm/blow

Estimated CBR

23.9 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

134.2 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

215.5 kPa

[PCA - Design of Concrete Pavement. 1955]

Layer 430-930mm bgl

50th Percentile penetration rate

7 mm/blow

Estimated CBR

38.6 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

182.2 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

296.0 kPa

[PCA - Design of Concrete Pavement. 1955]

Produced by	Dated	Checked by	Dated
ES	13/08/21	SF	30/09/21

DYNAMIC CONE PENETROMETER TEST REPORT

Project: SL01-R12

Project name: Sandilands

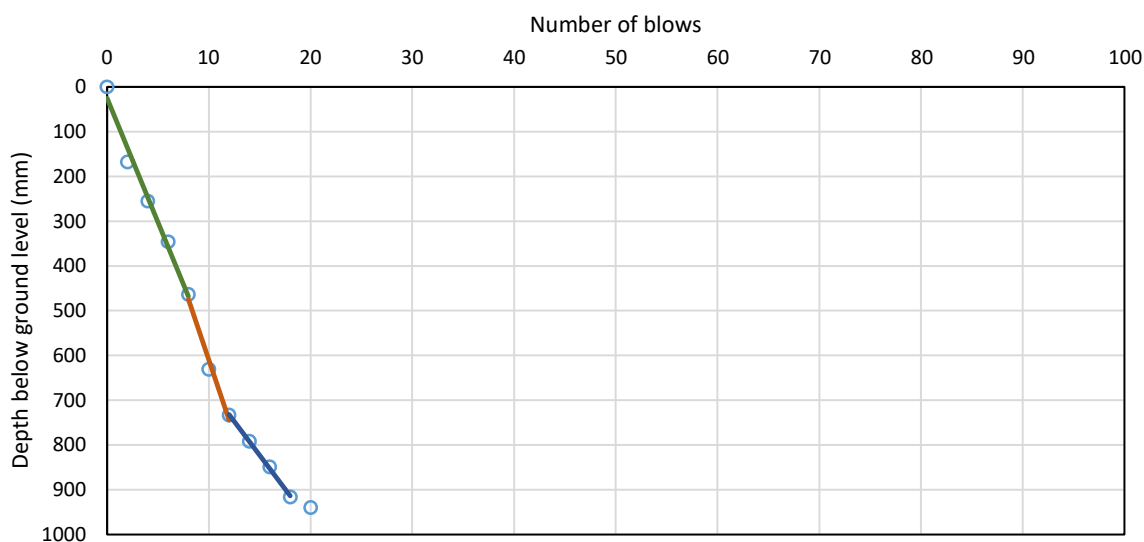
Report date: 13/08/2021

Operator: ES

Notes: Test started in grass

Test date: 13/08/2021

Test location: WS05



Layer 0-464mm bgl

50th Percentile penetration rate

28 mm/blow

Estimated CBR

8.9 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

71.3 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

111.9 kPa

[PCA - Design of Concrete Pavement. 1955]

Layer 464-733mm bgl

50th Percentile penetration rate

34 mm/blow

Estimated CBR

7.3 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

62.5 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

97.6 kPa

[PCA - Design of Concrete Pavement. 1955]

Layer 733-916mm bgl

50th Percentile penetration rate

16 mm/blow

Estimated CBR

16.1 %

[IAN 73/06 Rev1 (2009) - Clause 893]

Subgrade surface modulus

104.1 MPa

[TRRL LR 1132 - Appendix C Equation C1]

Estimated bearing capacity

165.7 kPa

[PCA - Design of Concrete Pavement. 1955]

Produced by	Dated	Checked by	Dated
ES	13/08/21	SF	30/09/21

APPENDIX F: Physical Testing

LABORATORY RESULTS - Atterberg Limit

Project SL01-R12 - SANDILANDS CP SCHOOL

Project No: SL01-R12

Sample					Results							
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description	Test Type	Point Data		Sym- bol	p %	>425 sieve µm	w _L %	w _p %
						Cone Pene.	Water % (Factor)					
BH02	3.00 (3.00)	D	C66895	Brown slightly sandy CLAY.	Fall Cone 4pt with increasing water content, cone type: 80g/30, washed over 425um sieve			CL	17	7%	30	13

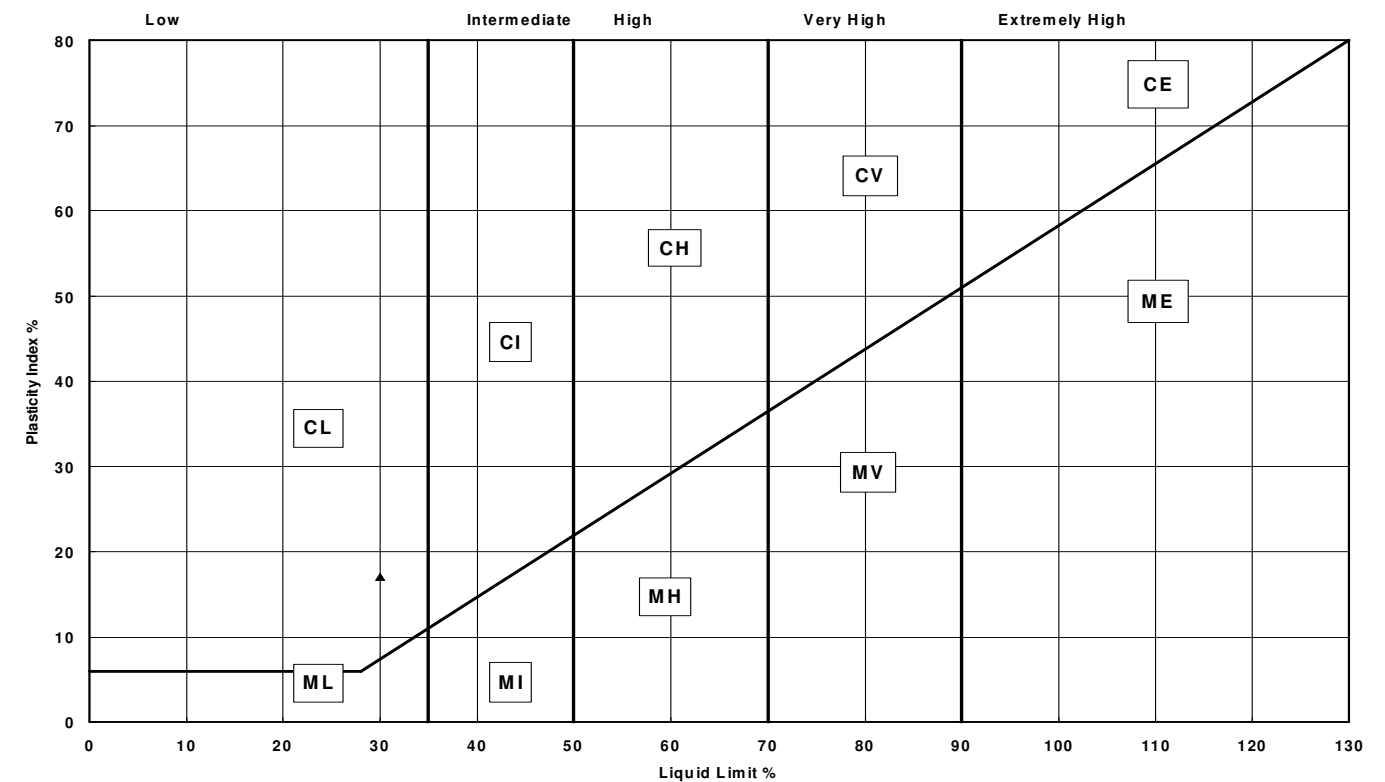


LABORATORY RESULTS - Classification Chart

Project: SL01-R12 SANDILANDS

Project No: SL01-R12

PLOT OF PLASTICITY INDEX AGAINST LIQUID LIMIT
for all items tested



Soil Type	Plasticity Characteristics
C Clay	L Low
	I Intermediate
M Silt	H High
	V Very High
	E Extremely High

Table of Soil Types and Plasticity Characteristics from BS 5930 : 1999

Remarks 25/08/2021



LABORATORY RESULTS - Particle Size Distribution

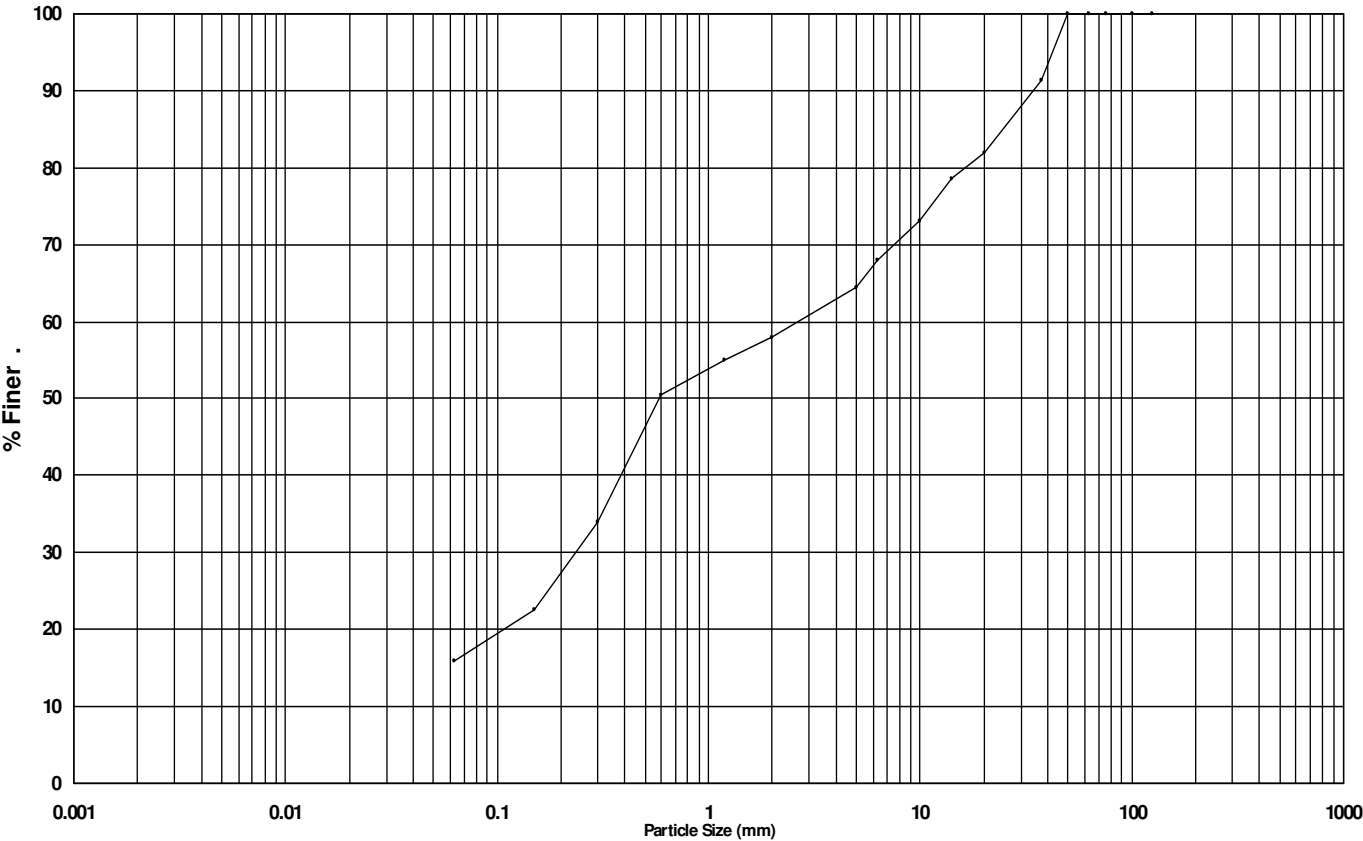
Project: SL01-R12 SANDILANDS

Hole BH01
Sample Depth 4.00m
Sample Type B
Sample Ref C66596

Project No: SL01-R12

Sample Description

Brown silty SAND and GRAVEL.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	16
SAND	42
GRAVEL	42
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	91
20 mm	82
14 mm	79
10 mm	73
6.3 mm	68
5 mm	65
2 mm	58
1.18 mm	55
600 μ m	50
300 μ m	34
150 μ m	23

Size	% Finer
63 μ m	16

Uniformity Coefficient	
Not Available	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks Sieve:-Test performed as "Non Standard" due to sample mass not being in accordance with BS EN ISO 17892-4:2016

25/08/2021



APPENDIX G: Chemical Testing



Certificate of Analysis

Certificate Number 21-18565

Issued: 29-Sep-21

Client 1ST HORIZON

The Old Pop Factory, 88-90 High Street

Dodworth, Barnsley

S75 3RQ

Our Reference 21-18565

Client Reference 2548

Order No (not supplied)

Contract Title Sandilands

Description 6 Soil samples.

Date Received 02-Sep-21

Date Completed 29-Sep-21

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

Adam Fenwick
Contracts Manager



2139

Summary of Chemical Analysis

Soil Samples

Our Ref 21-18565

Client Ref SL01-R12

Contract Title Sandilands

Lab No	1898561	1898562	1898563
Sample ID	WS01	WS03	WS05
Depth	0.30	0.30	0.30
Other ID			
Sample Type	SOIL	SOIL	SOIL
Sampling Date	13/08/2021	13/08/2021	16/08/2021
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
Metals						
Arsenic	DETSC 2301#	0.2	mg/kg	9.5		19
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	0.4		0.3
Cadmium	DETSC 2301#	0.1	mg/kg	0.2		0.3
Chromium	DETSC 2301#	0.15	mg/kg	16		21
Chromium III	DETSC 2301*	0.15	mg/kg	16		21
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0		< 1.0
Copper	DETSC 2301#	0.2	mg/kg	27		49
Lead	DETSC 2301#	0.3	mg/kg	68		120
Mercury	DETSC 2325#	0.05	mg/kg	0.17		0.29
Nickel	DETSC 2301#	1	mg/kg	18		23
Selenium	DETSC 2301#	0.5	mg/kg	0.7		< 0.5
Zinc	DETSC 2301#	1	mg/kg	47		95
Inorganics						
pH	DETSC 2008#		pH	7.0	6.7	6.1
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.5		0.6
Organic matter	DETSC 2002#	0.1	%	7.0		4.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	140	30	21
Sulphide	DETSC 2024*	10	mg/kg	< 10		< 10
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75		< 0.75
Petroleum Hydrocarbons						
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5		< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2		< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5		< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4		< 3.4
Aliphatic C35-C40	DETSC 3072*	3.4	mg/kg	< 3.4		< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10		< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01		< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9		< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5		< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6		< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4		< 1.4
Aromatic C35-C40	DETSC 3072*	1.4	mg/kg	< 1.4		< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10		< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10		< 10

Summary of Chemical Analysis

Soil Samples

Our Ref 21-18565

Client Ref SL01-R12

Contract Title Sandilands

Lab No	1898561	1898562	1898563
Sample ID	WS01	WS03	WS05
Depth	0.30	0.30	0.30
Other ID			
Sample Type	SOIL	SOIL	SOIL
Sampling Date	13/08/2021	13/08/2021	16/08/2021
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
PAHs						
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03		< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.04		< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03		< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.28		0.27
Anthracene	DETSC 3303	0.03	mg/kg	0.05		0.06
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.41		0.63
Pyrene	DETSC 3303#	0.03	mg/kg	0.39		0.62
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.15		0.31
Chrysene	DETSC 3303	0.03	mg/kg	0.19		0.37
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.18		0.41
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.07		0.17
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.12		0.30
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.06		0.15
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03		0.04
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.06		0.17
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	2.0		3.5
Phenols						
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	0.6		0.7

Summary of Chemical Analysis

Soil Samples

Our Ref 21-18565

Client Ref SL01-R12

Contract Title Sandilands

Lab No	1898564	1898565	1898566
Sample ID	WS07	WS08	WS08
Depth	0.30	0.30	1.50
Other ID			
Sample Type	SOIL	SOIL	SOIL
Sampling Date	n/s	16/08/2021	16/08/2021
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
Metals						
Arsenic	DETSC 2301#	0.2	mg/kg			3.8
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg			0.6
Cadmium	DETSC 2301#	0.1	mg/kg			0.5
Chromium	DETSC 2301#	0.15	mg/kg			9.5
Chromium III	DETSC 2301*	0.15	mg/kg			9.5
Chromium, Hexavalent	DETSC 2204*	1	mg/kg			< 1.0
Copper	DETSC 2301#	0.2	mg/kg			30
Lead	DETSC 2301#	0.3	mg/kg			140
Mercury	DETSC 2325#	0.05	mg/kg			< 0.05
Nickel	DETSC 2301#	1	mg/kg			32
Selenium	DETSC 2301#	0.5	mg/kg			0.5
Zinc	DETSC 2301#	1	mg/kg			61
Inorganics						
pH	DETSC 2008#		pH	8.3	8.6	8.7
Cyanide, Total	DETSC 2130#	0.1	mg/kg			0.2
Organic matter	DETSC 2002#	0.1	%			6.3
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	12	47	56
Sulphide	DETSC 2024*	10	mg/kg			12
Sulphur (free)	DETSC 3049#	0.75	mg/kg			< 0.75
Petroleum Hydrocarbons						
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg			< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg			< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg			< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg			19
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg			44
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg			62
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg			220
Aliphatic C35-C40	DETSC 3072*	3.4	mg/kg			67
Aliphatic C5-C35	DETSC 3072*	10	mg/kg			340
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg			< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg			< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg			< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg			10
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg			150
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg			430
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg			650
Aromatic C35-C40	DETSC 3072*	1.4	mg/kg			160
Aromatic C5-C35	DETSC 3072*	10	mg/kg			1200
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg			1600

Summary of Chemical Analysis

Soil Samples

Our Ref 21-18565

Client Ref SL01-R12

Contract Title Sandilands

Lab No	1898564	1898565	1898566
Sample ID	WS07	WS08	WS08
Depth	0.30	0.30	1.50
Other ID			
Sample Type	SOIL	SOIL	SOIL
Sampling Date	n/s	16/08/2021	16/08/2021
Sampling Time	n/s	n/s	n/s

Test	Method	LOD	Units			
PAHs						
Naphthalene	DETSC 3303#	0.03	mg/kg			2.0
Acenaphthylene	DETSC 3303#	0.03	mg/kg			0.76
Acenaphthene	DETSC 3303#	0.03	mg/kg			4.7
Fluorene	DETSC 3303	0.03	mg/kg			3.6
Phenanthrene	DETSC 3303#	0.03	mg/kg			13
Anthracene	DETSC 3303	0.03	mg/kg			6.1
Fluoranthene	DETSC 3303#	0.03	mg/kg			13
Pyrene	DETSC 3303#	0.03	mg/kg			12
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg			4.7
Chrysene	DETSC 3303	0.03	mg/kg			4.1
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg			4.0
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg			1.8
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg			12
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg			3.6
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg			0.86
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg			4.3
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg			89
Phenols						
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg			1.9

Summary of Asbestos Analysis Soil Samples

Our Ref 21-18565
Client Ref SL01-R12
Contract Title Sandilands

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
1898561	WS01 0.30	SOIL	NAD	none	Darryl Fletcher
1898563	WS05 0.30	SOIL	NAD	none	Darryl Fletcher
1898566	WS08 1.50	SOIL	NAD	none	Darryl Fletcher

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * - not included in laboratory scope of accreditation.

Information in Support of the Analytical Results

Our Ref 21-18565

Client Ref SL01-R12

Contract Sandilands

Containers Received & Deviating Samples

Lab No	Sample ID	Date Sampled	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
1898561	WS01 0.30 SOIL	13/08/21	GJ 250ml, GJ 60ml x2	Aliphatics/Aromatics (14 days), BTEX (14 days), Sulphur (free) (7 days), Naphthalene (14 days), PAH MS (14 days), pH + Conductivity (7 days), Cyanide/Mono pHoh (14 days)	
1898562	WS03 0.30 SOIL	13/08/21	GJ 250ml	pH + Conductivity (7 days)	
1898563	WS05 0.30 SOIL	16/08/21	GJ 250ml, GJ 60ml	Aliphatics/Aromatics (14 days), BTEX (14 days), Sulphur (free) (7 days), Naphthalene (14 days), PAH MS (14 days), pH + Conductivity (7 days), Cyanide/Mono pHoh (14 days)	
1898564	WS07 0.30 SOIL		GJ 250ml, GJ 60ml x2	Sample date not supplied, Anions 2:1 (30 days), pH + Conductivity (7 days)	
1898565	WS08 0.30 SOIL	16/08/21	GJ 250ml, GJ 60ml x2	pH + Conductivity (7 days)	
1898566	WS08 1.50 SOIL	16/08/21	GJ 250ml, GJ 60ml x2	Aliphatics/Aromatics (14 days), BTEX (14 days), Sulphur (free) (7 days), Naphthalene (14 days), PAH MS (14 days), pH + Conductivity (7 days), Cyanide/Mono pHoh (14 days)	

Key: G-Glass J-Jar

DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377.

Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.

The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

End of Report



Certificate of Analysis

Certificate Number 21-18565

Issued: 29-Sept-21

Client 1ST HORIZON

The Old Pop Factory,
88-90 High Street

Dodworth, Barnsley

S75 3RQ

Our Reference 21-05082

Client Reference (not supplied)

Order No (not supplied)

Contract Title Sandilands

Description One Soil sample.

Date Received 14-Aug-21

Date Completed 15-Sept-21

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

A handwritten signature in black ink, appearing to read "A Fenwick", is placed over a faint circular stamp.

Adam Fenwick
Contracts Manager





Summary of Chemical Analysis

Soil Samples

Our Ref 21-18565

Client Ref

Contract Title Sandilands

Lab No	1815110
Sample ID	BH01
Depth	2
Other ID	
Sample Type	SOIL
Sampling Date	12/08/2021
Sampling Time	n/s

Test	Method	LOD	Units
Inorganics			
pH	DETSC 2008#		pH 8.5
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l 47



Information in Support of the Analytical Results

Our Ref 21-18565

Client Ref

Contract Sandilands

Containers Received & Deviating Samples

Lab No	Sample ID	Date		Containers Received	Holding time exceeded for tests	Inappropriate container for tests
		Sampled				
1815110	BH01	12/08/21	PT 1L		pH + Conductivity (7 days)	
Key: P-Plastic T-Tub DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.						

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377.

Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.

The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-

Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

End of Report



1ST HORIZON

T: +44 (0)1226 766 446 **E:** office@1sth.co.uk www.1sth.co.uk

The Old Pop Factory | 88-90 High Street | Dodworth | Barnsley | S75 3RQ

Company Registration No: 5792353 | VAT Registration No: 886 5956 47