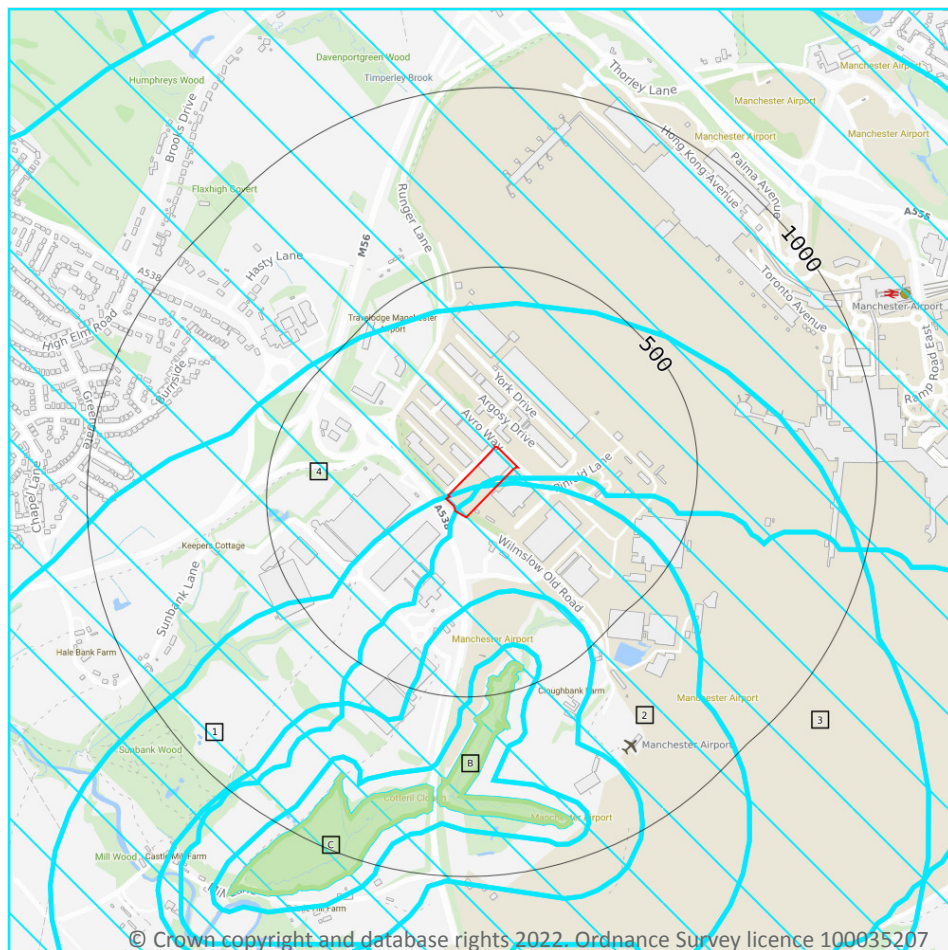


SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site

4

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 66**

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 50 or more houses outside existing settlements/urban areas. Air pollution - Any development that could cause air pollution (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons & digestate stores, manure stores). Combustion - All general combustion processes. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management. Composting - Any composting proposal. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .
2	On site	Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 50 or more houses outside existing settlements/urban areas. Air pollution - Any development that could cause air pollution (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons & digestate stores, manure stores). Combustion - All general combustion processes. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management. Composting - Any composting proposal. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Discharges - Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .



ID	Location	Type of developments requiring consultation
3	On site	Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction. Rural non-residential - Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 50 or more houses outside existing settlements/urban areas. Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 200m², manure stores > 250t). Combustion - General combustion processes >20mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Landfill. incl: inert landfill, non-hazardous landfill, hazardous landfill. Composting - Any composting proposal with more than 500 tonnes maximum annual operational throughput. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Discharges - Any discharge of water or liquid waste of more than 2m³/day to ground (ie to seep away) or to surface water, such as a beck or stream. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .
4	On site	Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 50 or more houses outside existing settlements/urban areas. Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 200m², manure stores > 250t). Combustion - General combustion processes >20mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Landfill. incl: inert landfill, non-hazardous landfill, hazardous landfill. Composting - Any composting proposal with more than 500 tonnes maximum annual operational throughput. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .

This data is sourced from Natural England.



10.18 SSSI Units

Records within 2000m

2

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

Features are displayed on the SSSI Impact Zones and Units map on **page 66**

ID: B
 Location: 426m S
 SSSI name: Cotteril Clough
 Unit name: Eastern Woodland
 Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Lowland mixed deciduous woodland	Favourable	13/06/2013
Wet woodland	Favourable	13/06/2013

ID: C
 Location: 758m S
 SSSI name: Cotteril Clough
 Unit name: Western Woodland
 Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
 Condition: Favourable
 Reportable features:

Feature name	Feature condition	Date of assessment
Lowland mixed deciduous woodland	Favourable	30/05/2014
Wet woodland	Favourable	30/05/2014

This data is sourced from Natural England and Natural Resources Wales.



11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m

0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m

0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.



This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m

0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m

0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m

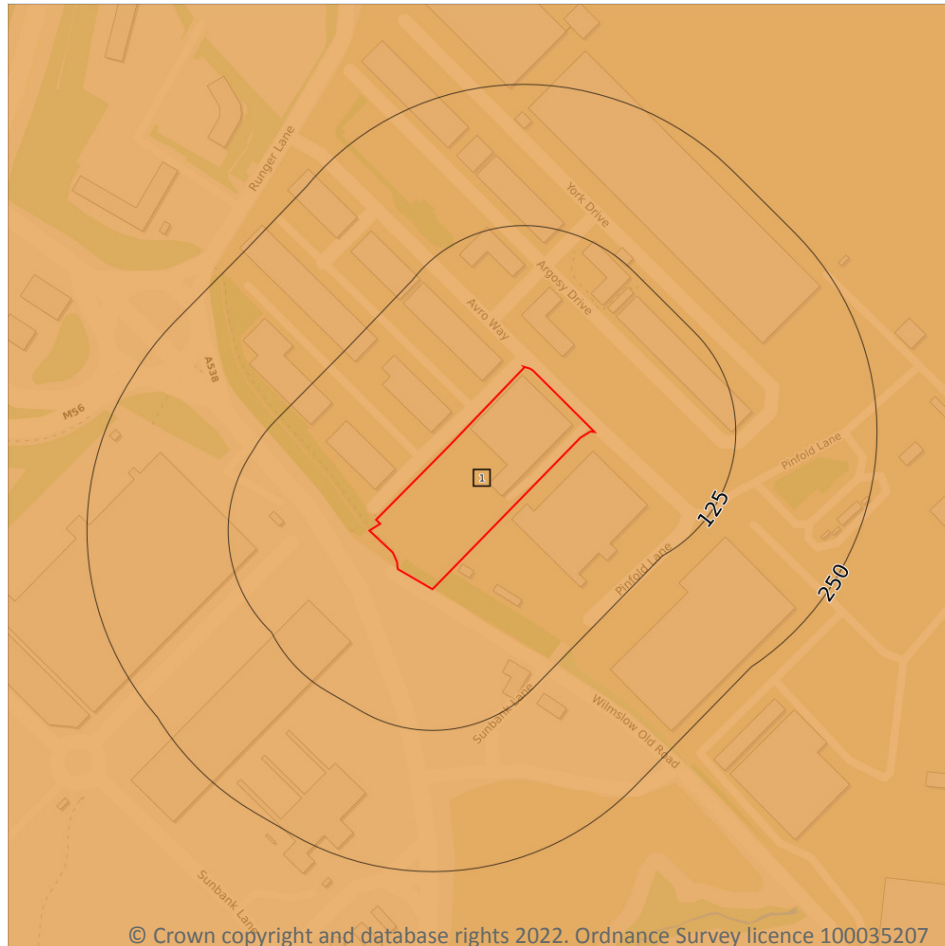
0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.



12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m

1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 72**

ID	Location	Classification	Description
1	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

This data is sourced from Natural England.



12.2 Open Access Land

Records within 250m

0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m

0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.

13 Habitat designations



- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m

8

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on **page 74**

ID	Location	Main Habitat	Other habitats
1	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
B	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
C	1m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
B	2m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
C	3m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	114m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0
----------------------------	----------

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	0
----------------------------	----------

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

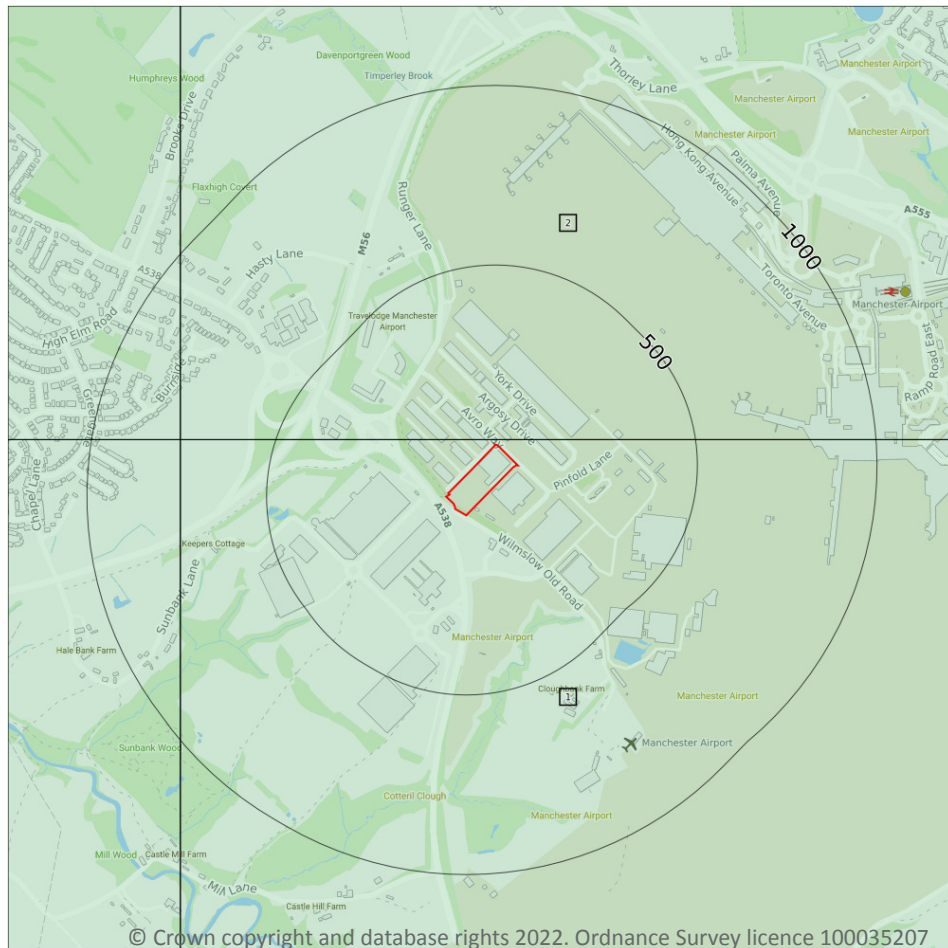
Records within 250m	0
----------------------------	----------

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



— Site Outline

Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

2

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 76**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	SJ88SW
2	14m N	No coverage	Full	Full	No coverage	SJ88NW

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Artificial and made ground

14.2 Artificial and made ground (10k)

Records within 500m

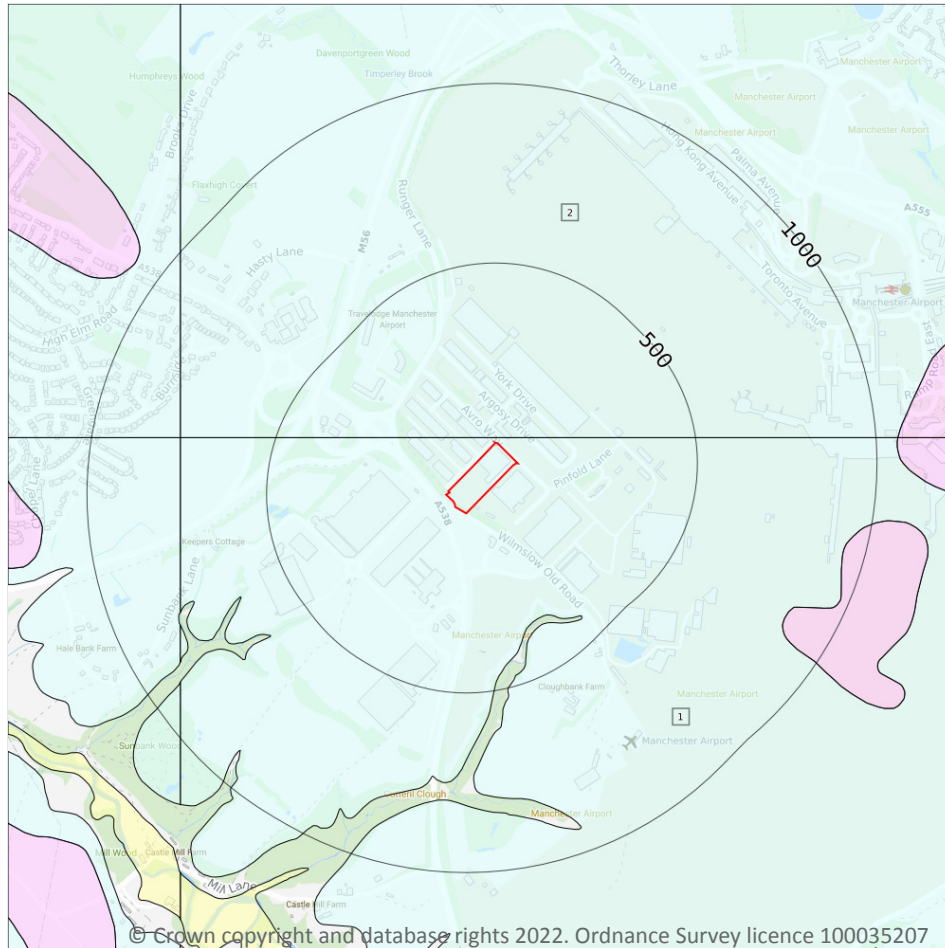
0

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



— Site Outline

Search buffers in metres (m)

▣ Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m

2

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 78**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton
2	14m N	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton

This data is sourced from the British Geological Survey.



14.4 Landslip (10k)

Records within 500m

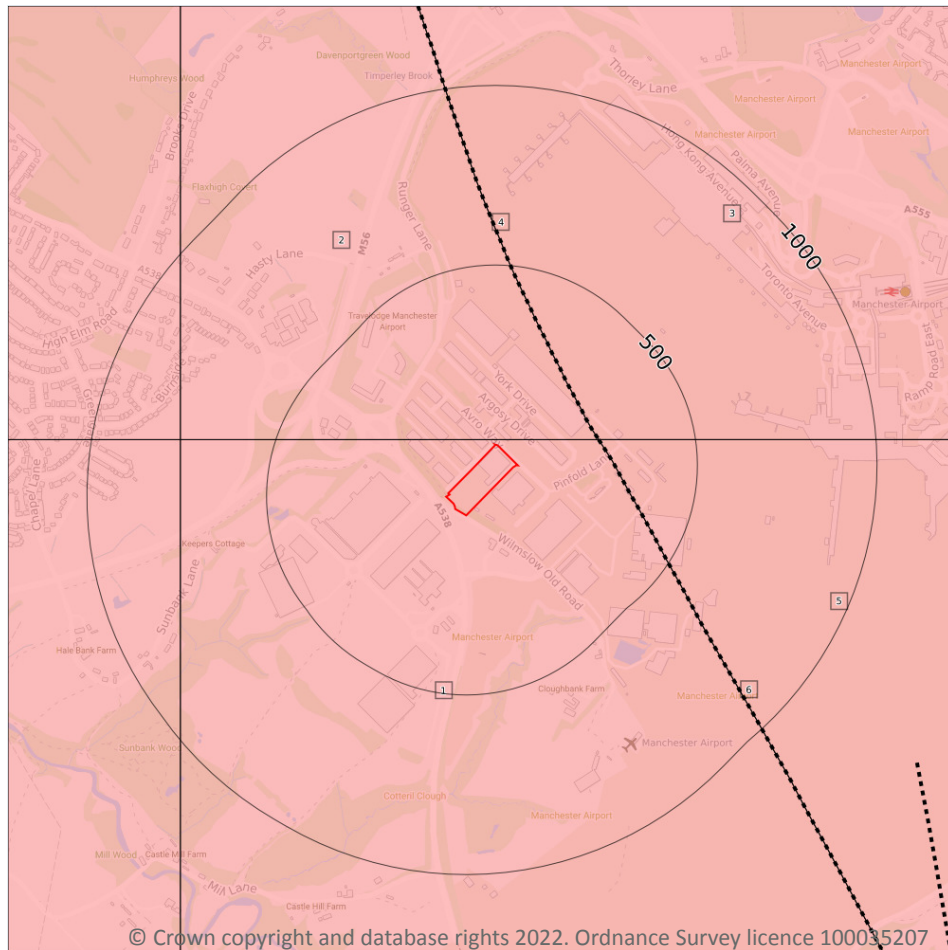
0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

..... Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m

4

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 80**

ID	Location	LEX Code	Description	Rock age
1	On site	BOM-MDST	Bollin Mudstone Member - Mudstone	Anisian Age
2	14m N	BOM-MDST	Bollin Mudstone Member - Mudstone	Anisian Age
3	229m NE	BOM-MDST	Bollin Mudstone Member - Mudstone	Anisian Age
5	236m E	BOM-MDST	Bollin Mudstone Member - Mudstone	Anisian Age



This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

2

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

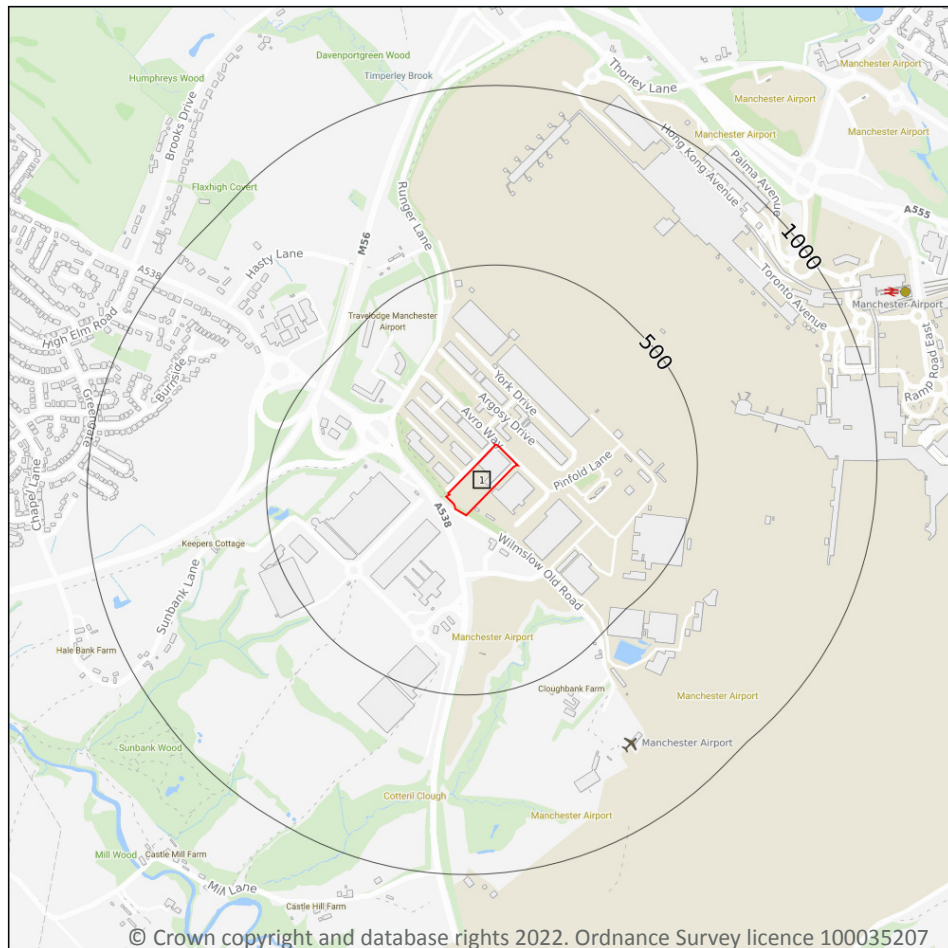
Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 80**

ID	Location	Category	Description
4	229m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
6	236m E	FAULT	Normal fault, inferred; crossmarks on downthrow side

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline

Search buffers in metres (m)

□ Geological map tile

15.1 50k Availability

Records within 500m

1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 82**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	Full	EW098_stockport_v4

This data is sourced from the British Geological Survey.



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

15.2 Artificial and made ground (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

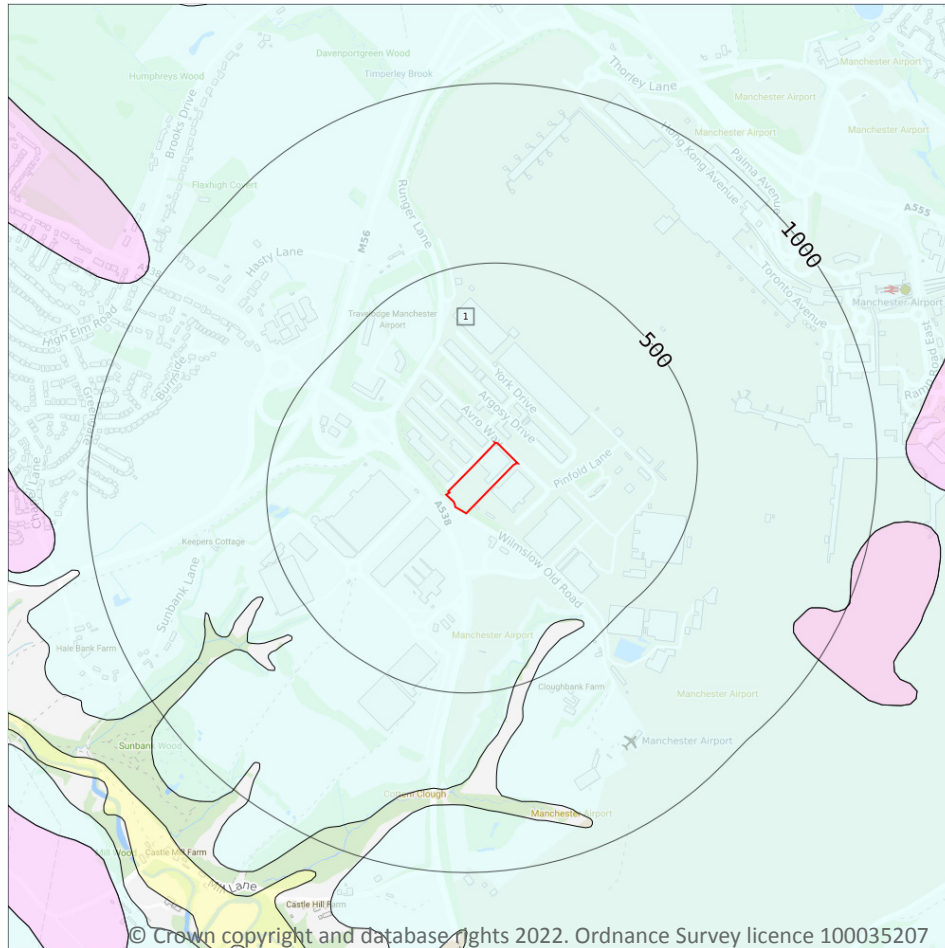
0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



15.4 Superficial geology (50k)

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 84**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON

This data is sourced from the British Geological Survey.



15.5 Superficial permeability (50k)

Records within 50m

2

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Low
14m NE	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

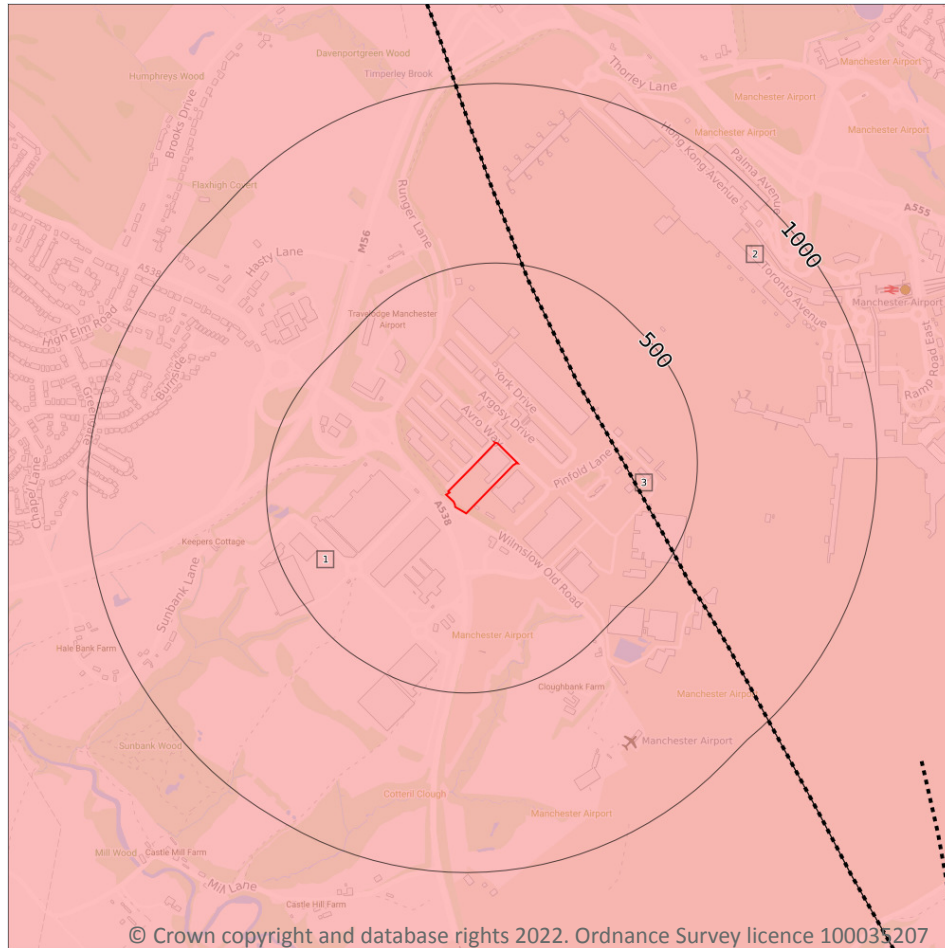
Records within 50m

0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

..... Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

2

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 86**

ID	Location	LEX Code	Description	Rock age
1	On site	BOM-MDST	BOLLIN MUDSTONE MEMBER - MUDSTONE	ANISIAN
2	257m NE	BOM-MDST	BOLLIN MUDSTONE MEMBER - MUDSTONE	ANISIAN

This data is sourced from the British Geological Survey.



15.9 Bedrock permeability (50k)

Records within 50m

2

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Low	Low
14m N	Fracture	Low	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

1

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

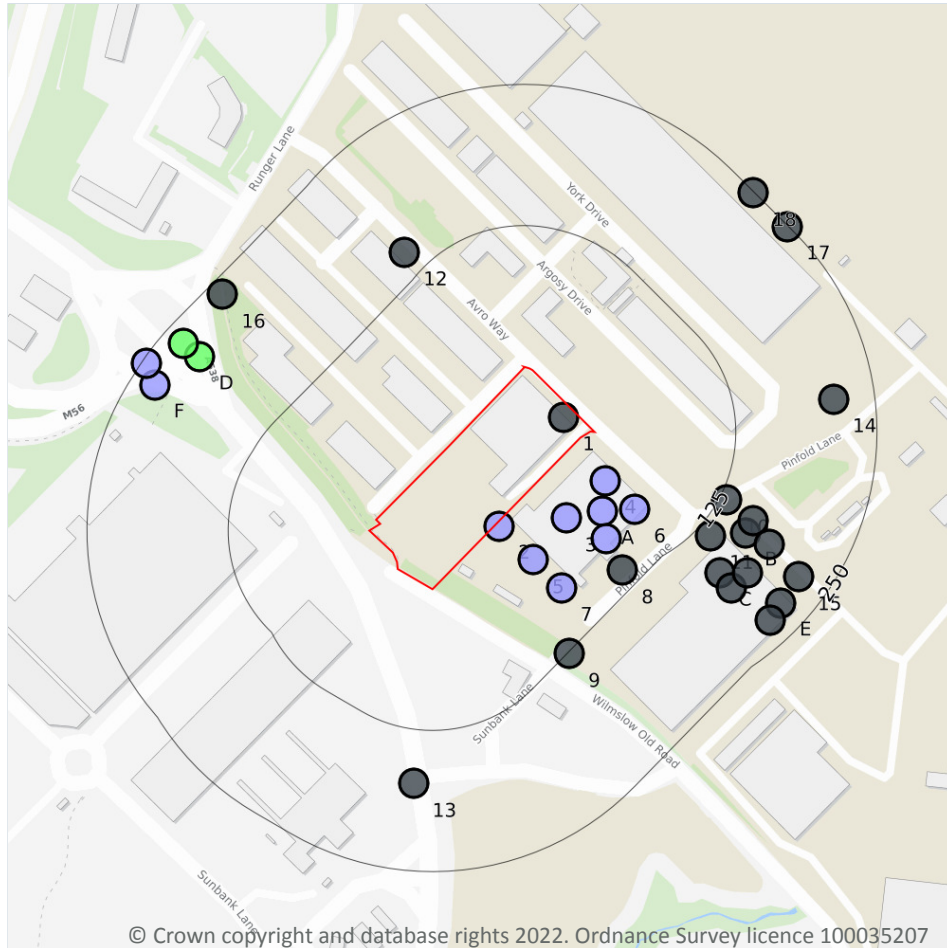
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 86**

ID	Location	Category	Description
3	257m NE	FAULT	Fault, inferred

This data is sourced from the British Geological Survey.



16 Boreholes



— Site Outline
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m

32

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

Features are displayed on the Boreholes map on **page 88**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	380912 384941	CARGO PHASE 4 DEVELOPMENT 1	-	Y	N/A
2	3m SE	380855 384845	CATERAIR INTERNATIONAL, MANCHESTER AIRPORT BH6.	4.0	N	18525493



ID	Location	Grid reference	Name	Length	Confidential	Web link
3	41m SE	380914 384852	MARRIOTT IN-FLITE SERVICES LTD, MANCHESTER AIRPORT 1	4.0	N	17877420
4	43m SE	380949 384885	MARRIOTT IN-FLITE SERVICES LTD, MANCHESTER AIRPORT 2	4.0	N	17877421
5	46m SE	380885 384815	CATERAIR INTERNATIONAL, MANCHESTER AIRPORT BH7.	4.0	N	18525494
A	59m SE	380946 384858	MARRIOTT IN-FLITE SERVICES LTD, MANCHESTER AIRPORT 5	4.5	N	17877424
6	77m SE	380975 384860	MARRIOTT IN-FLITE SERVICES LTD, MANCHESTER AIRPORT 4	4.0	N	17877423
A	79m SE	380950 384834	MARRIOTT IN-FLITE SERVICES LTD, MANCHESTER AIRPORT 3	4.0	N	17877422
7	81m SE	380910 384790	CATERAIR INTERNATIONAL, MANCHESTER AIRPORT BH8.	4.0	N	18525495
8	109m SE	380964 384806	SURFACE WTR OUTFALL R BOLLIN	-	Y	N/A
9	127m SE	380917 384732	SURFACE WTR OUTFALL R BOLLIN	-	Y	N/A
10	131m SE	381056 384868	SURFACE WTR OUTFALL R BOLLIN	-	Y	N/A
11	138m SE	381042 384836	MTMF RINGWAY 1	-	Y	N/A
12	146m NW	380771 385087	CARGO PHASE 4 DEVELOPMENT 2	-	Y	N/A
B	161m SE	381073 384839	MTMF RINGWAY TP 1	-	Y	N/A
B	161m SE	381080 384850	HANGAR 5 MANCHESTER AIRPORT H5WS1	-	Y	N/A
C	166m SE	381050 384804	MTMF RINGWAY TP 2	-	Y	N/A
13	173m S	380779 384617	SURFACE WTR OUTFALL R BOLLIN	-	Y	N/A
C	184m SE	381060 384790	HANGAR 5 MANCHESTER AIRPORT H5WS2	-	Y	N/A
B	184m SE	381094 384829	MTMF RINGWAY 2	-	Y	N/A
C	184m SE	381075 384804	MTMF RINGWAY TP 3	-	Y	N/A
D	213m NW	380590 384995	Smart Motorway Programme NA_27482_BH9	10.25	N	20783227
14	214m E	381151 384957	SURFACE WTR OUTFALL R BOLLIN	-	Y	N/A
15	222m SE	381120 384800	HANGAR 5 MANCHESTER AIRPORT H5WS3	-	Y	N/A
E	224m SE	381104 384777	MTMF RINGWAY TP 4	-	Y	N/A
E	228m SE	381095 384762	MTMF RINGWAY 3	-	Y	N/A
F	229m NW	380550 384970	M56 WIDENING JUNCTIONS 4 - 6 BH14	6.0	N	713330

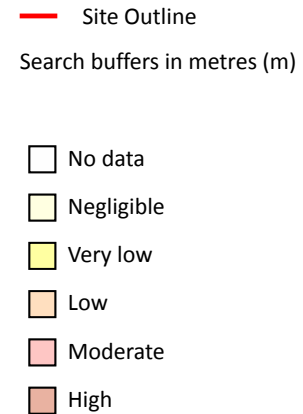
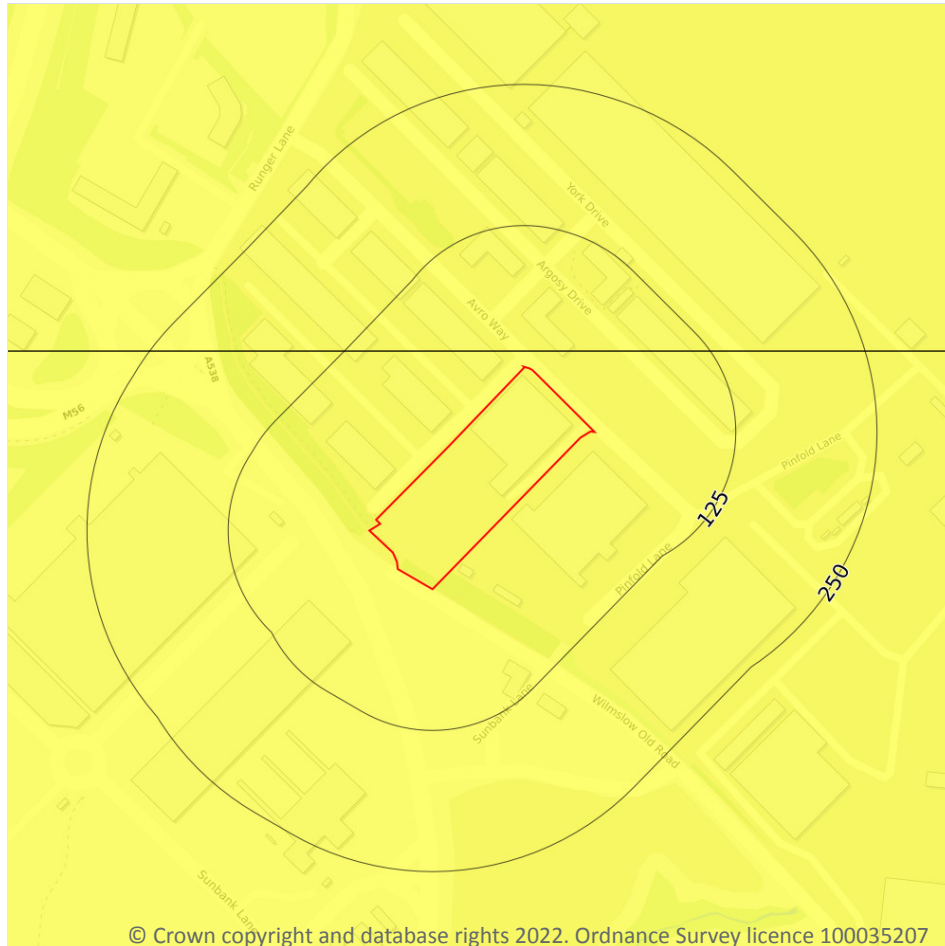


ID	Location	Grid reference	Name	Length	Confidential	Web link
D	232m NW	380575 385007	Smart Motorway Programme NA_27482_BH8	10.05	N	20783208
16	237m NW	380610 385050	INTERNATIONAL APRON EXTENSION PHASE II 18	-	Y	N/A
F	246m NW	380543 384989	M56 JUNCTION 6 TP9/06	2.0	N	19892231
17	249m NE	381110 385110	INTERNATIONAL APRON EXTENSION PHASE II TP2	-	Y	N/A
18	249m NE	381080 385140	INTERNATIONAL APRON EXTENSION PHASE II TP1	-	Y	N/A

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m

2

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

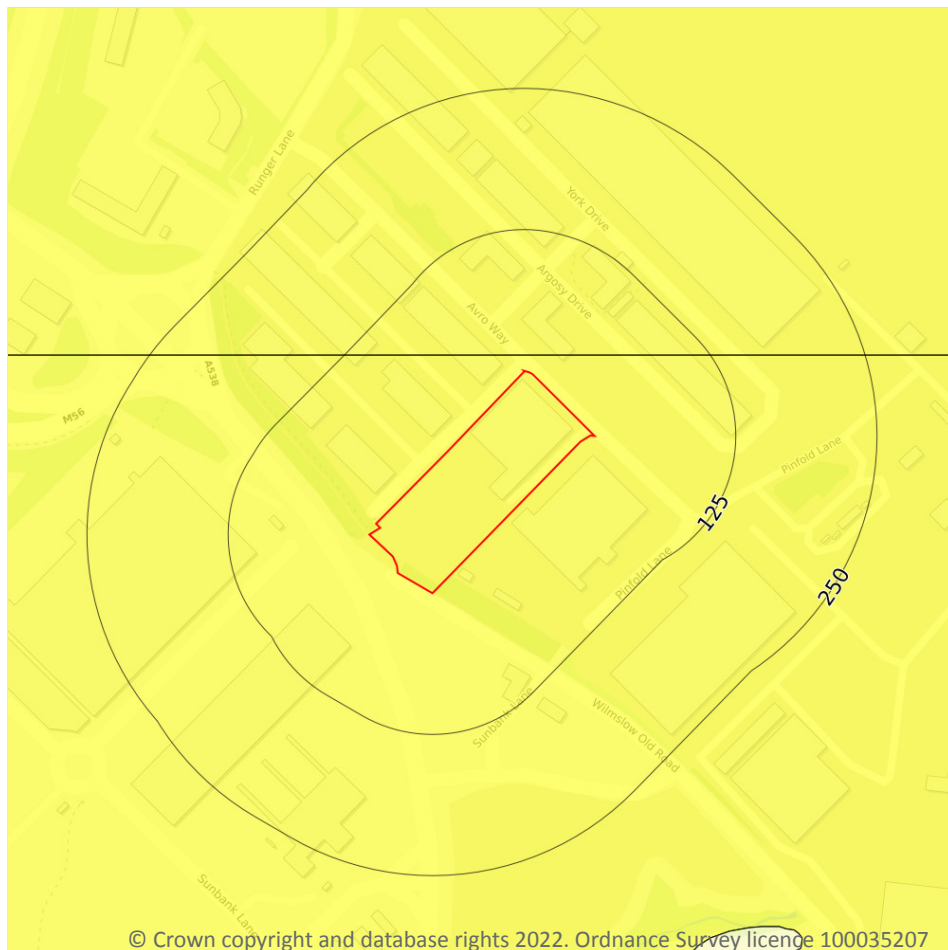
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 91**

Location	Hazard rating	Details
On site	Very low	Ground conditions predominantly low plasticity.
14m N	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.2 Running sands

Records within 50m

2

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

Features are displayed on the Natural ground subsidence - Running sands map on **page 92**

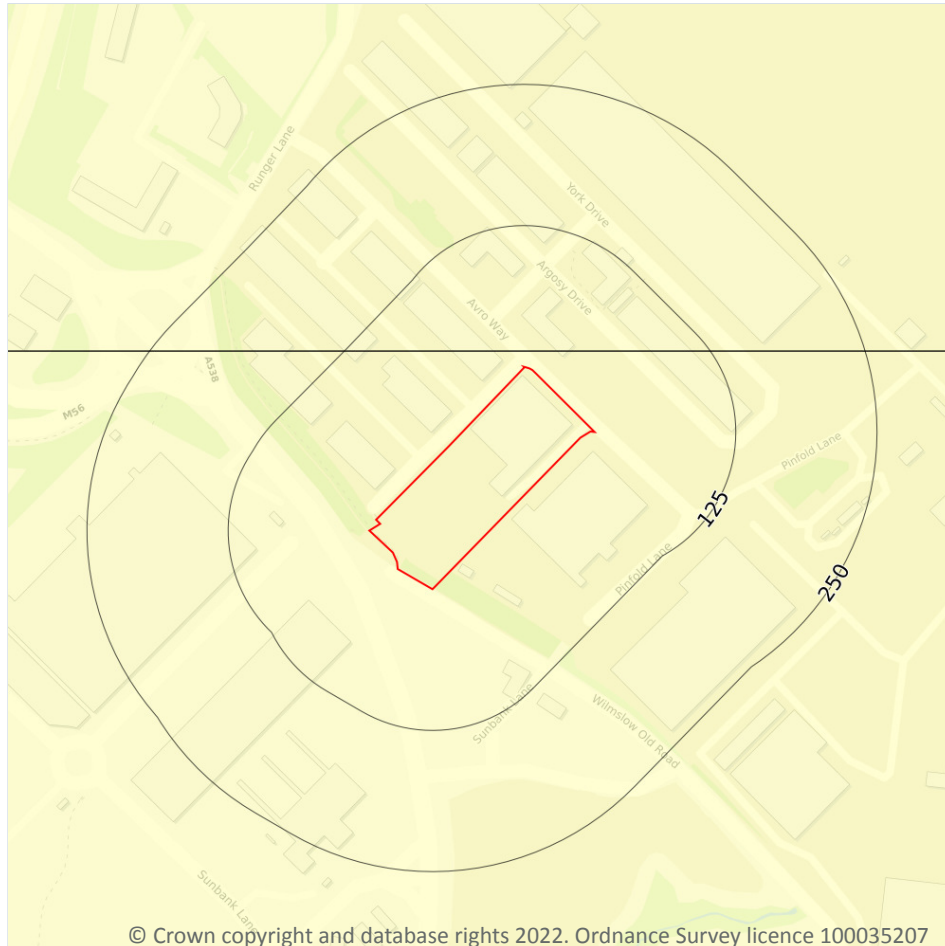
Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

Location	Hazard rating	Details
14m N	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.3 Compressible deposits

Records within 50m

2

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

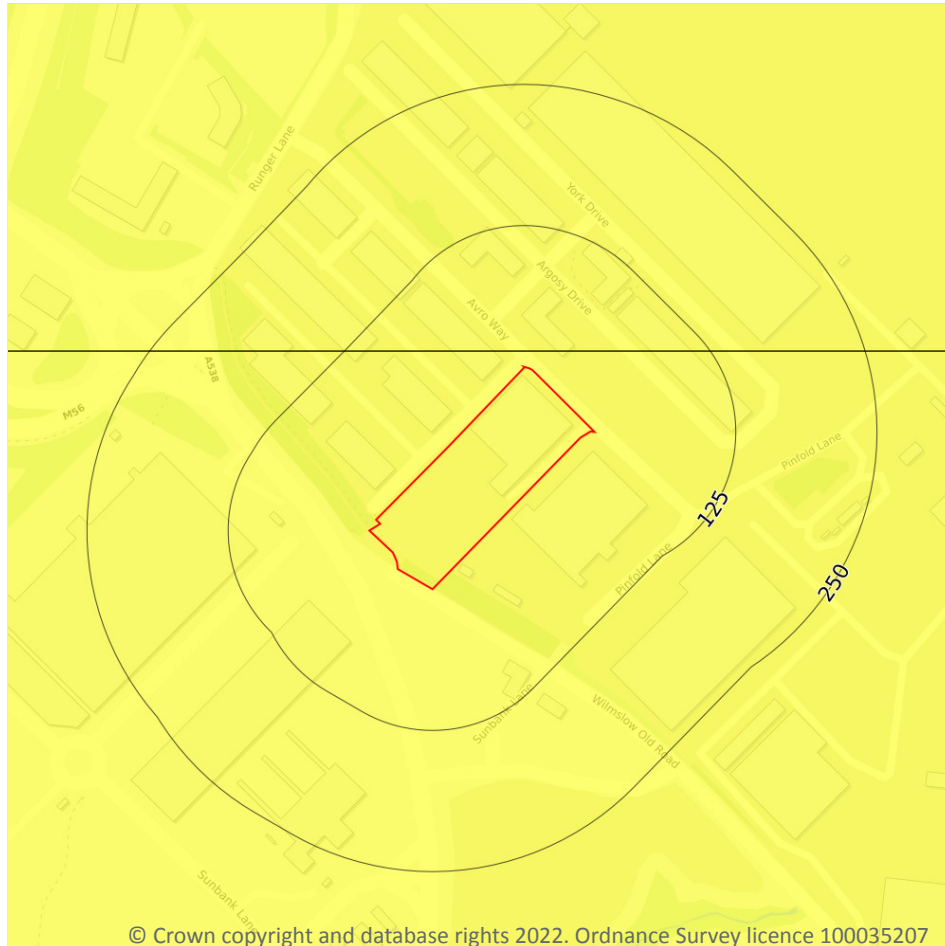
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 94**

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
14m N	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

© Crown copyright and database rights 2022. Ordnance Survey licence 100035207

17.4 Collapsible deposits

Records within 50m

2

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

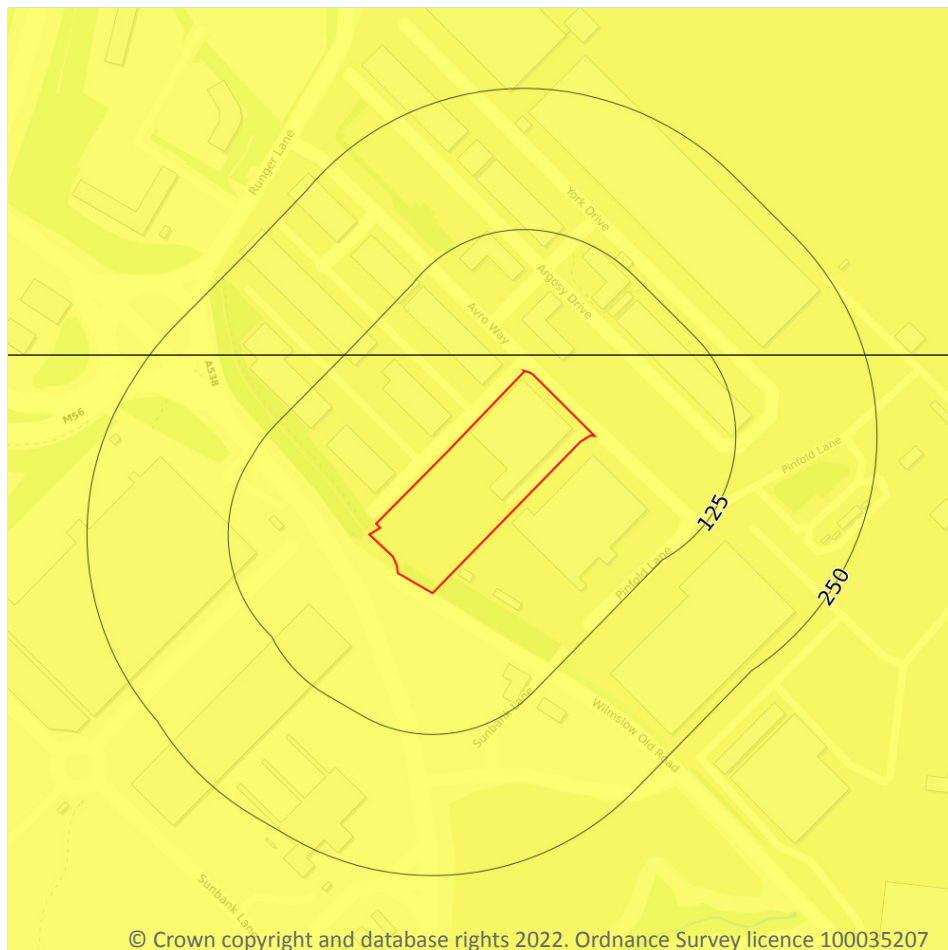
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 95**

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.
14m N	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.5 Landslides

Records within 50m

2

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

Features are displayed on the Natural ground subsidence - Landslides map on **page 96**

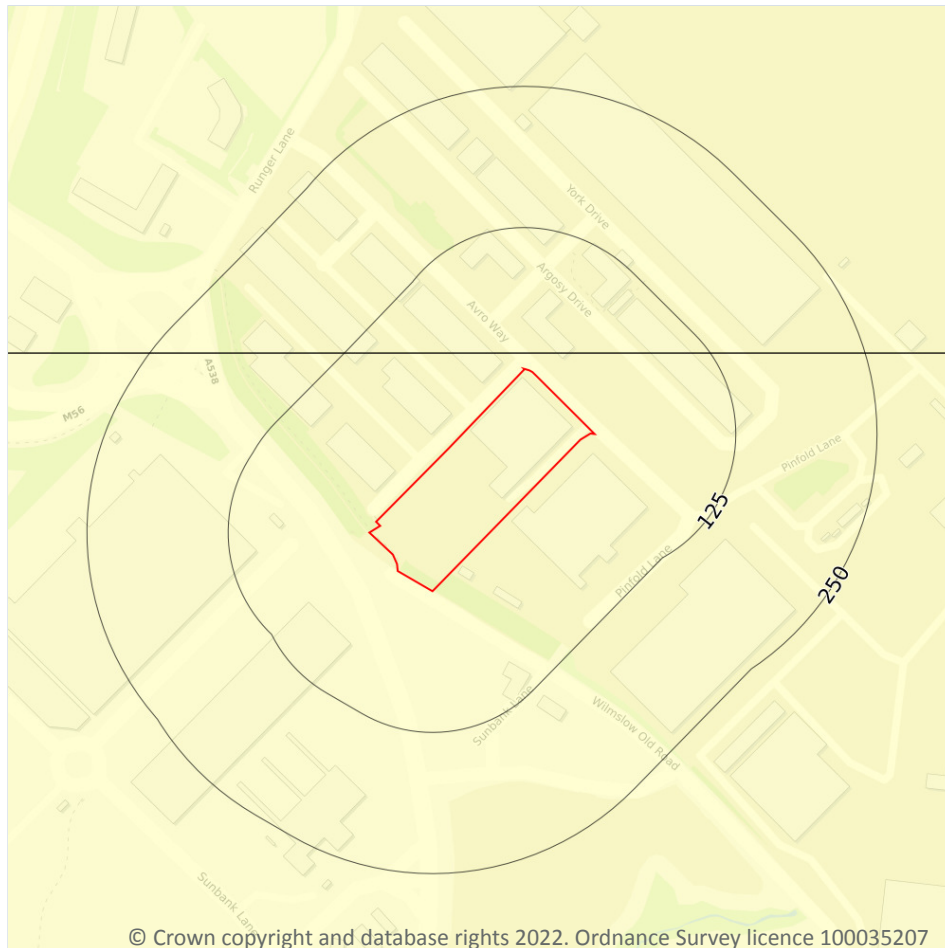
Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

Location	Hazard rating	Details
14m N	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



— Site Outline
Search buffers in metres (m)

- ☐ No data
- ☐ Negligible
- ☐ Very low
- ☐ Low
- ☐ Moderate
- ☐ High

17.6 Ground dissolution of soluble rocks

Records within 50m

2

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

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 98**

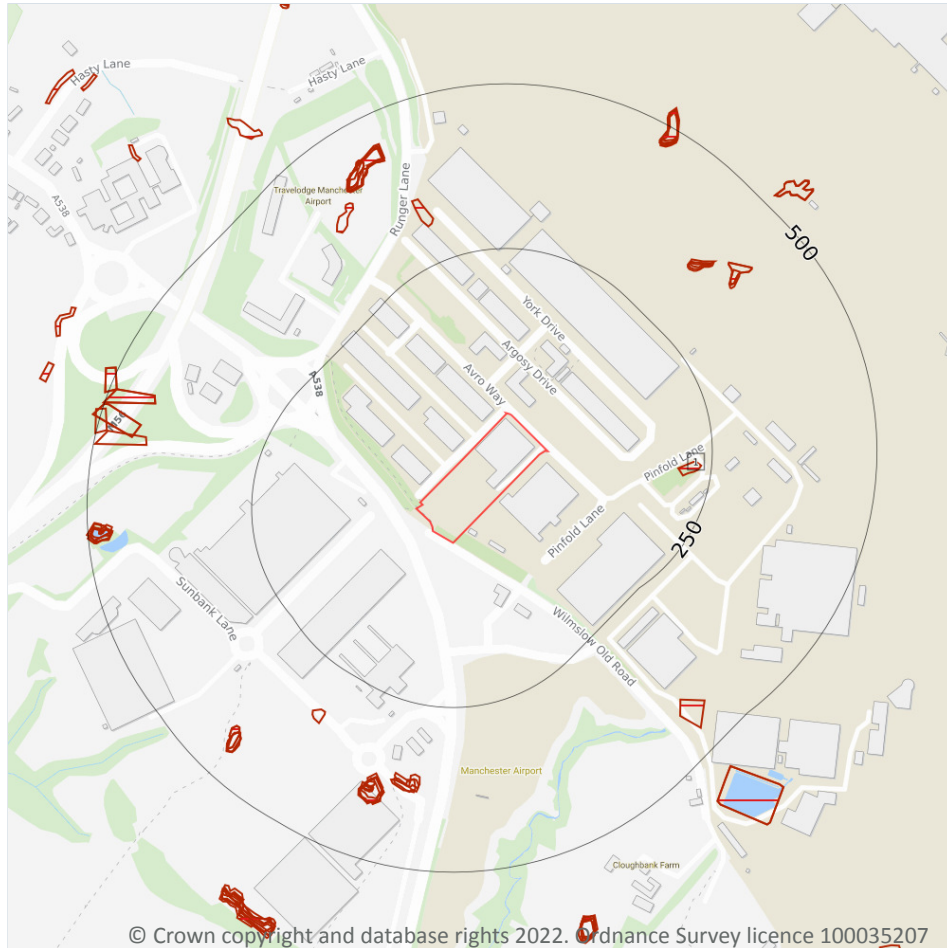
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

Location	Hazard rating	Details
14m N	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

This data is sourced from the British Geological Survey.



18 Mining, ground workings and natural cavities



- Site Outline
- Search buffers in metres (m)
- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities
- Non Coal Mining
- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 Natural cavities

Records within 500m

0

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

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m

0

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

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

1

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 100**

ID	Location	Land Use	Year of mapping	Mapping scale
1	200m E	Pond	1974	1:10000

This data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m

0

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

This data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

0

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

This data is sourced from the British Geological Survey.



18.6 Non-coal mining

Records within 1000m

0

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

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m

0

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

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site

0

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

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site

0

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

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site

1

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

Location	Details
On site	The site is located within the Cheshire Brine Compensation District. The extraction of brine over many years has caused some properties within the Cheshire area to be at risk of subsidence. This subsidence can occur a considerable distance from the location of the extraction and further assessment is recommended. A Cheshire Salt search can be obtained direct from Groundsure or your preferred search provider.

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

18.11 Gypsum areas

Records on site	0
-----------------	---

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

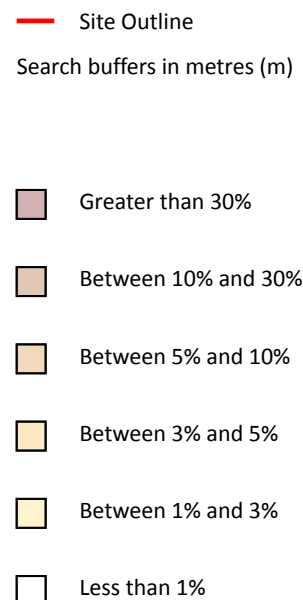
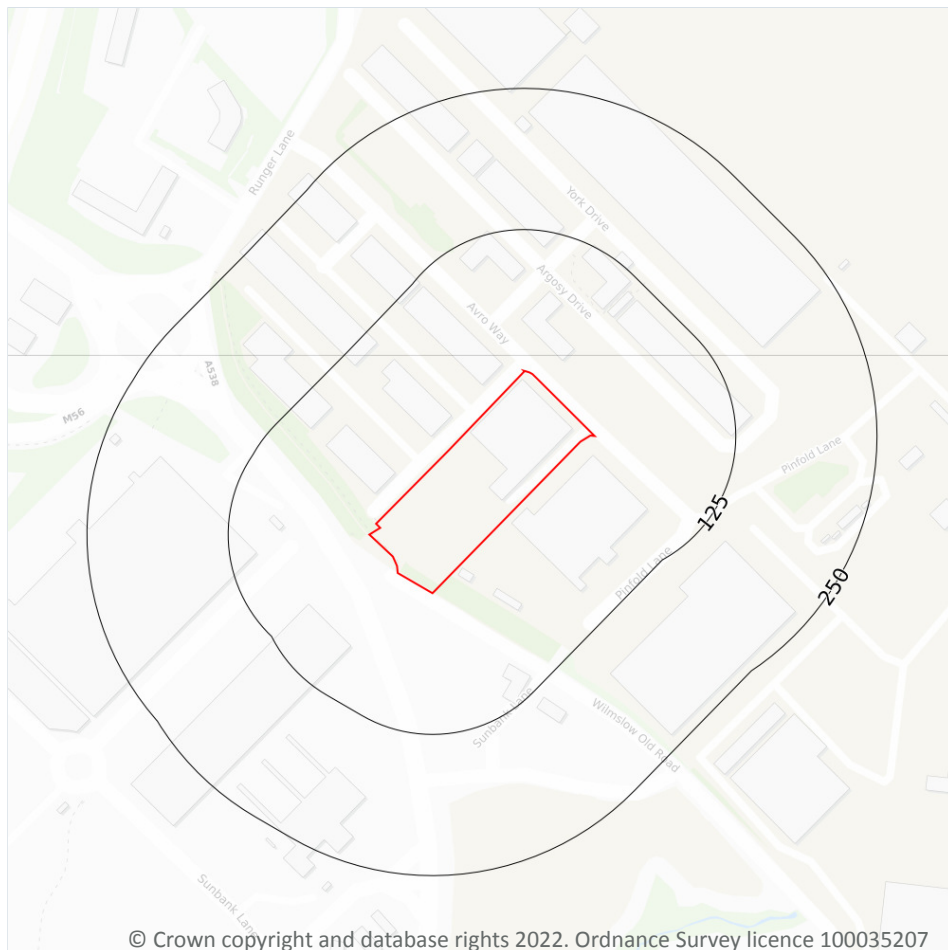
18.13 Clay mining

Records on site	0
-----------------	---

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

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

19 Radon



19.1 Radon

Records on site

1

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

Features are displayed on the Radon map on **page 104**

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

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



20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

3

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
14m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
14m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



21 Railway infrastructure and projects

21.1 Underground railways (London)

Records within 250m

0

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

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m

0

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

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m

0

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

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m

0

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



This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m	0
---------------------	---

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	0
---------------------	---

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m	0
---------------------	---

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

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m	0
---------------------	---

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

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m	0
---------------------	---

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

This data is sourced from HS2 Ltd.



Data providers

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

Terms and conditions

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



Appendix C Historical Borehole Logs

DUNELM DRILLING CO.

BOREHOLE RECORD

Contract No. C7100

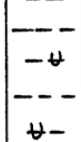
Client: WHITE YOUNG CONSULTING ENGINEER

Ground Level.

Location CATERAIR MANCHESTER AIRPORT

Date 4/1/94

BOREHOLE No. BH6 + BH7

Depth	Thick- ness	Legend	Description of Strata	Type of Sample	C kN/m ²	M %	Ø	Density Kg/m ³	N
<u>BH6</u>									
0.60	0.60		SOFT MOIST MEDIUM BROWN CLAY WITH STONES AND BROKEN TARMAC - <u>MADE GROUND</u>	U100 0.75	45.4	27.4	-	1820	
	0.90		FIRM MOTTLED BROWN AND GREY <u>CLAY</u>	U100 1.60	31.9	23.5	-	1885	
1.50	2.50		INITIALLY VERY SOFT REDDISH BROWN CLAY SLIGHTLY MAZLY WITH OCCASIONAL GREY VEINS BECOMING STIFF WITH DEPTH	U100 2.75	89.2	21.5	-	2030	
4.00				U100 4.00	111.1	20.4	-	2040	
<u>DRY</u>									
<u>BH7</u>									
0.60	0.60		LOOSE CONCRETE, BRICKS, STONES, CLAY AND TARMAC	SPT 0.90					12
0.90	0.30		REINFORCED CONCRETE OBSTRUCTION						
1.20	0.30		MED. DENSE HARDLORE <u>FILL</u> (POSSIBLE OLD RUNWAY)	U100 1.50	86.2	19.6	-	2110	
	1.10		FIRM TO STIFF MEDIUM BROWN AND GREY MOTTLED <u>CLAY</u>	U100 2.50	180.0	21.8	-	2060	
2.30	1.70		FIRM TO STIFF TO STIFF DARK REDDISH BROWN SLIGHTLY MAZLY <u>CLAY</u>	U100 4.00	108.0	15.9	-	2030	
4.00									
SLIGHT WATER IN UPPER MADE GROUND - REMAINDER DRY									
Water Struck at <u>AS SHOWN</u> Standing Water Level <u> </u>									

DUNELM DRILLING CO.

BOREHOLE RECORD

Contract No. C7100

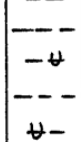
Client: WHITE YOUNG CONSULTING ENGINEER

Ground Level.

Location CATERAIR MANCHESTER AIRPORT

Date 4/1/94

BOREHOLE No. BH6 + BH7

Depth	Thick- ness	Legend	Description of Strata	Type of Sample	C kN/m ²	M %	Ø	Density Kg/m ³	N
<u>BH6</u>									
0.60	0.60		SOFT MOIST MEDIUM BROWN CLAY WITH STONES AND BROKEN TARMAC - <u>MADE GROUND</u>	U100 0.75	45.4	27.4	-	1820	
	0.90		FIRM MOTTLED BROWN AND GREY <u>CLAY</u>	U100 1.60	31.9	23.5	-	1885	
1.50	2.50		INITIALLY VERY SOFT REDDISH BROWN CLAY SLIGHTLY MAZLY WITH OCCASIONAL GREY VEINS BECOMING STIFF WITH DEPTH	U100 2.75	89.2	21.5	-	2030	
4.00				U100 4.00	111.1	20.4	-	2040	
<u>DRY</u>									
<u>BH7</u>									
0.60	0.60		LOOSE CONCRETE, BRICKS, STONES, CLAY AND TARMAC	SPT 0.90					12
0.90	0.30		REINFORCED CONCRETE OBSTRUCTION	U100 1.50	86.2	19.6	-	2110	
1.20	0.30		MED. DENSE HARDLORE <u>FILL</u> (POSSIBLE OLD RUNWAY)	U100 2.50	180.0	21.8	-	2060	
	1.10		FIRM TO STIFF MEDIUM BROWN AND GREY MOTTLED <u>CLAY</u>	U100 4.00	108.0	15.9	-	2030	
2.30	1.70		FIRM TO STIFF TO STIFF DARK REDDISH BROWN SLIGHTLY MAZLY <u>CLAY</u>						
4.00									
SLIGHT WATER IN UPPER MADE GROUND - REMAINDER DRY									
Water Struck at <u>AS SHOWN</u> Standing Water Level <u> </u>									

DUNELM DRILLING CO.

BOREHOLE RECORD

Contract No. C7100

Client: WHITE YOUNG CONSULTING ENGINEERS

Ground Level.....

Location..... **CATERAIR MANCHESTER AIRPORT**

Date 4/1/94

BOREHOLE No. BH8

[illegible]

Water Struck at.....DRY.....

Standing Water Level.....

Appendix D Correspondence with Regulatory Authorities

Hartas, William

From: Hartas, William
Sent: 22 February 2022 17:53
To: enquiries@environment-agency.gov.uk
Cc: Davies, Matthew
Subject: FOI Request - Land Contamination / Environmental Information.

Good Afternoon I hope this email finds you well.

We are undertaking a Stage 1 Tier 1 risk assessment as per LC:RM on behalf of our client, Manchester Airport Group and would be grateful if you could provide information on the following with respect to the site located off Avro Way near Manchester Aiport (Postcode M90 1QX):

1. Status under waste management regulations;
2. Any enforcements or prosecutions under control of Water Resources Act;
3. Information regarding any other relevant legislation such as IPPC, IRR etc.; and
4. Details of surface/groundwater abstractions and/or details of Private Water Supplies.
5. Status including any enforcement notices under Part II EPA
6. Any known records of landfilling or remediation on or in the vicinity of the site; and/or
7. Any correspondence or Enforcement Notices connected to the site with regard to nuisance issues (odours, dust, smoke, vermin etc.)



Kind Regards,

Will

Senior Geo-environmental Consultant,
Ground, Energy & Transactions Solutions
M +44 (0)7468 709 055
William.hartas@aecon.com

AECOM

1 New York Street, Manchester, M1 4HD, UK
T +44-(0)161-601-1700
aecon.com

Hartas, William

From: Hartas, William
Sent: 22 February 2022 17:48
To: 'contact@manchester.gov.uk'; 'Ian Westbrook'
Cc: Davies, Matthew
Subject: RE: Environmental Information (EIR / FOI) request.

Good Afternoon Ian and wider team at Manchester Public Health.

We are undertaking a Stage 1 Tier 1 risk assessment as per LC:RM on behalf of our client, Manchester Airport Group and would be grateful if you could provide information on the following with respect to the site located off Avro Way near Manchester Airport (Postcode M90 1QX)

- Contamination issues at or adjacent to the site;
- Sites determined to be statutory contaminated land within 250 metres;
- Statutory Nuisance Notices in force within 100 metres; and
- Private Water Supplies Regulations registered abstractions within 500 metres.

Note we are aware of the environmental searches offered via your website including the provisional reports, we are however not interested in procuring the entire report as already hold the majority of information via another proprietary report for consultants. As such we would be interested and very grateful if you could provide the information under an EIR/FOI request.



Any queries please get in touch.

Kind Regards,

Will

Senior Geo-environmental Consultant,
Ground, Energy & Transactions Solutions
M +44 (0)7468 709 055
William.hartas@aecon.com

AECOM
1 New York Street, Manchester, M1 4HD, UK
T +44-(0)161-601-1700
aecom.com

Hartas, William

From: Ian Westbrook <ian.westbrook@manchester.gov.uk>
Sent: 24 February 2022 21:06
To: Hartas, William
Subject: [EXTERNAL] Environmental search in the vicinity of a site located off Avro Way, M90 1QX

Good morning Will,

Further to your enquiry regarding possible environmental issues in the vicinity of a site located off Avro Way, M90 1QX.

Following a search of records held by the council's Environmental Protection Department, I can confirm the following:

1. There are no known contamination issues at or adjacent to the site.
2. There are no sites determined to be statutory contaminated land within 250m of the site.
3. There are no statutory notices in force within 100m of the site.
4. There are no Private Water Supplies Regulations registered abstractions within 500m of the site.

Regards,

Ian Westbrook

Environmental Protection
Neighbourhoods Directorate
Manchester City Council
1 Hammerstone Road
Gorton
Manchester
M18 8EQ

External: 0161 234 5004

Internal: 31381

Email: i.westbrook@manchester.gov.uk

Web: <http://www.manchester.gov.uk>

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed.

If you have received this email in error, please notify the system manager.

The full text of the Council's email disclaimer is available at www.manchester.gov.uk/emaildisclaimer.

Your personal data is very important to us. Please refer to our privacy notice at www.manchester.gov.uk/privacy for further information.

This footnote also confirms that this email message has been swept for the presence of computer viruses.

Appendix E Greystar UK Aviation Fuel Pipeline Location



Appendix F Geotechnical Risk Register

A Geotechnical Risk Register has been compiled to show the degree of risk attached to various ground related aspects of the proposed scheme. The purpose of the register is to produce an assessment of the risk to the project posed by site specific ground related problems and identify suitable mitigation measures to control the risk to an acceptable level. The risk register should be developed and refined as the geotechnical design and assessment progresses such that the register will allow management of the geotechnical risks.

The degree of risk (R) is determined by combining an assessment of the likelihood (L) of the hazard with an assessment of the severity (S) of the hazard. The scale against which the likelihood and severity are measured, and the resulting degree of risk determined is presented in the risk register for the proposed scheme below.

Classification of Probability and Impact

Likelihood (L)		Severity (S)	
Very Likely	5	Very High	5
Likely	4	High	4
Probable	3	Medium	3
Unlikely	2	Low	2
Negligible	1	Very Low	1

Risk Matrix

Likelihood	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
		Severity				

Classification of Risk Rating

Risk rating	Response
Intolerable	Unacceptable
Substantial	Early Attention
Tolerable	Regular Attention
Trivial	Monitor

14.1 Geotechnical Risk Register

Identified Geotechnical Hazard	Location	Cause	Risk before Control			Consequence	Possible Mitigation Measures
			L	S	RR (LxS)		
Aggressive Ground Chemistry	Scheme Wide	Made Ground, Glacial Till and Bollin Mudstone Member are potentially sulphide/sulphate bearing stratum.	4	3	12	Deleterious effects on buried concrete/piles;	Analyse BRE test results and design concrete mix during detailed design in accordance with BRE guidance.
Frost susceptible soils	Scheme Wide	Construction of pavement. Silt-rich soils.	2	3	6	Surface Damage or alternative design. Frost heave.	Ground Investigation to identify underlying ground conditions and assess risk. Increase pavement thickness to incorporate risk.
Shrinkable Clay Soils	Scheme Wide	Artificial and or Superficial deposits.	2	3	6	Damage to structures due to seasonal subsidence and heave of clay soils, and near trees	Check Atterberg limits of cohesive soil and specify foundations according to relevant guidance. E.g. NHBC
Challenges re-using site won material for earthworks.	Scheme Wide	Potential Cobbles and boulders in Glacial Till	3	3	9	Potential difficulty compacting Glacial Till as an engineered fill due to potential presence of coarse granular material. Increased costs from importing suitable material.	Import suitable engineering fill or remove coarse material from existing site won material. Carry out testing to classify material.
Variable thickness and composition of superficial deposits and Made Ground/Variab le hard ground	Scheme Wide	The inherent variability of glacial tills and Made Ground or variable rock head level and variable properties of rock	3	3	9	Unsuitable method of construction. Potential presence of boulders/buried concrete structures may obstruct piling/drilling. Obstruction or difficult to excavate or drill through. Additional cost	Ground investigation for the proposed site extents and any likely structure locations to reduce risk of potential obstructions or difficult ground.
The presence of weak and compressible soils	Scheme Wide	Presence of soft cohesive and loose granular Glacial deposits. Glacial tills are typically highly variable in composition. Compressible materials	3	4	12	Differential settlement as a result of differing foundation material. Failure of structures or earthworks.	Carry out suitable ground investigation and specify appropriate foundations.

		may be present. Made Ground is expected in many areas across the site.					
Weak pavement formation	Scheme Wide	Site soils including Made Ground may be variable or possess low Cu/CBR/Stiffness values. This may result in weak pavement formation and differential settlement	3	2	6	Increased cost such as resurfacing access roads and car park may be required.	Investigation including Compaction and California Bearing Ratio testing to inform pavement design and potentially the reuse of site materials . Undertake remediation for instance implementation of mechanical compaction, thicker capping material, ground improvement (lime improvement/soil stabilisation) or excavation and replace.
Historic development of site.	Scheme Wide	Known and unknown/unrecorded buried structures.	2	3	6	Costs due to damage to plant and delays removing obstructions. Potential settlement issue in areas between proposed and existing foundations of previous structures.	Ground investigation for the proposed site extents and any likely structure locations to reduce risk of potential obstructions. Proposed work to be located away from existing foundations.
Re-grading of site	Scheme Wide	Slope stability and long-term settlement of raised earthwork.	3	3	9	Failure of earthworks slopes and serviceability issues with excessive total and differential settlement, if this is a concern to the area of the scheme	Carry out a ground investigation and design earthworks appropriately.
UXO	Scheme Wide	Potential UXO related to historical military activity as a result of being part of the Airport during WWII)	3	5	15	H&S Impact during excavations, ground investigation, piling and construction.	Commission of a specialist UXO desk study to further clarify the risk at the site and specify appropriate mitigation for ground investigation and construction.
Buried Services	Scheme Wide	Potential striking of subsurface services and/or utilities.	3	5	15	Injury or death, wide disruption, economic cost, commercial reputation damage.	Obtain up to date service and utility plans/surveys and asses. Conduct relevant PAS128 survey along with the use of CAT scanners and survey using GPR if necessary. Dig hand dug pits to 1.2mbgl using insulated tools and periodically CAT scan the pit.

