

15.10 Bedrock faults and other linear features (50k)

Records within 500m

3

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.

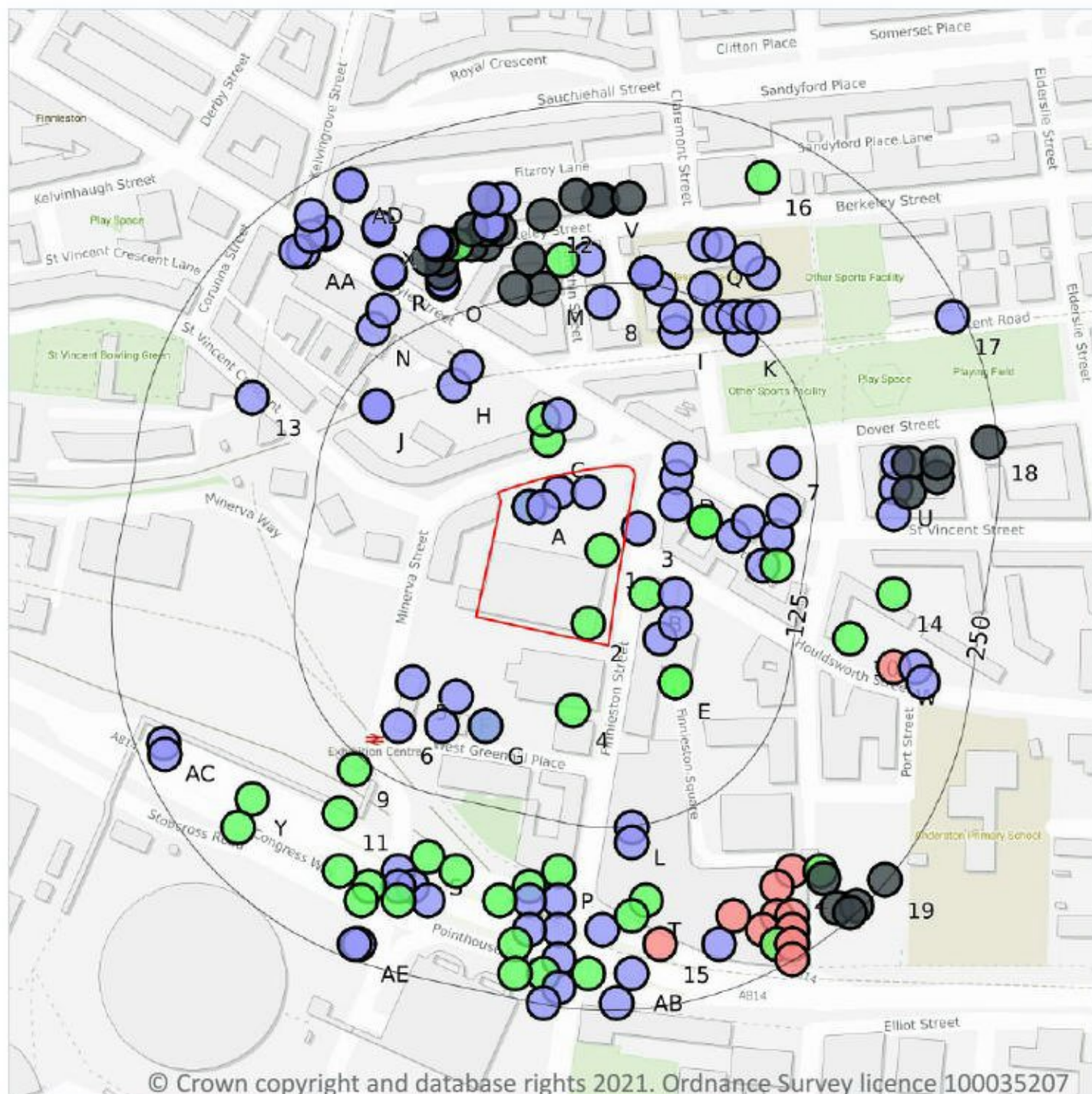
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 78**

ID	Location	Category	Description
2	On site	FAULT	Fault, inferred, displacement unknown
6	174m S	FAULT	Fault, inferred
13	437m SW	FAULT	Fault, inferred, displacement unknown

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

182

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 81**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	257350 665650	ANDERSTON	13.0	N	1091711
2	On site	257340 665600	FINNIESTON	19.0	N	1087757
A	On site	257300 665680	ANDERSTON	12.0	N	1091709



ID	Location	Grid reference	Name	Length	Confidential	Web link
A	On site	257300 665680	1-21 MINERVA ST/2-4 FINNIESTON	9.0	N	1092572
A	On site	257320 665690	1-21 MINERVA ST/2-4 FINNIESTON	9.0	N	1092574
A	On site	257340 665690	1-21 MINERVA ST/2-4 FINNIESTON	9.0	N	1092575
A	On site	257310 665680	1-21 MINERVA ST/2-4 FINNIESTON	9.0	N	1092573
3	8m E	257375 665665	CLYDESIDE EXPRESSWAY	6.0	N	1089888
B	21m E	257380 665620	HOULDSWORTH STREET, GLASGOW 2	13.0	N	1089605
C	25m N	257313 665726	CLYDESIDE EXPRESSWAY	24.0	N	1089873
D	29m E	257401 665700	CLYDESIDE EXPRESSWAY	6.0	N	1089875
D	31m E	257400 665682	CLYDESIDE EXPRESSWAY	10.0	N	1089876
D	33m E	257403 665713	CLYDESIDE EXPRESSWAY	6.0	N	1089874
B	35m E	257390 665590	ANDERSTON REDEVELOPMENT AREA	7.0	N	1091688
C	40m N	257310 665740	ANDERSTON	11.0	N	1091708
B	40m E	257400 665620	HOULDSWORTH STREET, GLASGOW 1	6.0	N	1089604
C	41m N	257320 665743	CLYDESIDE EXPRESSWAY	6.0	N	1089872
B	43m E	257400 665600	ANDERSTON REDEV BORE	7.0	N	1087444
4	49m S	257330 665540	FINNIESTON	24.0	N	1087755
D	52m E	257420 665670	ANDERSTON REDEVELOPMENT AREA	12.0	N	1091682
D	52m E	257420 665670	ANDERSTON REDEV BORE	12.0	N	1087437
E	52m SE	257400 665560	ANDERSTON	11.0	N	1091713
E	52m SE	257400 665560	FINNIESTON 2	26.0	N	1087752
F	56m S	257250 665550	MINERVA STREET, GLASGOW TP4	3.0	N	1136112
5	62m SW	257220 665560	MINERVA STREET, GLASGOW TP3	3.0	N	1136111
G	72m S	257270 665530	MINERVA STREET, GLASGOW BH1	12.0	N	1136108
G	72m S	257270 665530	MINERVA STREET, GLASGOW TP1	2.0	N	1136109
D	73m E	257440 665660	CRANSTONHILL POLICE H.Q.	7.0	N	1091221
F	78m S	257240 665530	MINERVA STREET, GLASGOW TP5	3.0	N	1136113
H	79m NW	257248 665763	CLYDESIDE EXPRESSWAY	6.0	N	1089871
D	82m E	257450 665670	CRANSTONHILL POLICE H.Q.	7.0	N	1091220



ID	Location	Grid reference	Name	Length	Confidential	Web link
H	88m N	257257 665776	CLYDESIDE EXPRESSWAY	6.0	N	1089870
6	92m SW	257210 665530	MINERVA STREET, GLASGOW TP2	3.0	N	1136110
D	96m E	257460 665640	CRANSTONHILL POLICE H.Q.	7.0	N	1091219
I	98m N	257400 665800	KENT ROAD PUBLIC SCHOOL 8	8.0	N	1090228
J	102m NW	257195 665749	BRIDGE 126 LINER NO. 2	2.0	N	1087338
J	102m NW	257195 665749	BRIDGE 126 LINER NO. 1	3.0	N	1087337
J	102m NW	257195 665749	BRIDGE 126 LINER NO. 4	2.0	N	1087340
J	102m NW	257195 665749	BRIDGE 126 LINER NO. 3	3.0	N	1087339
D	103m E	257470 665660	CRANSTONHILL POLICE H.Q.	7.0	N	1091218
7	103m E	257475 665710	CLYDESIDE EXPRESSWAY	6.0	N	1089877
D	104m E	257474 665677	CLYDESIDE EXPRESSWAY	6.0	N	1089878
D	106m E	257470 665640	ANDERSTON	14.0	N	1091712
I	107m N	257400 665810	KENT ROAD PUBLIC SCHOOL 7	5.0	N	1090227
8	112m N	257350 665820	KENT ROAD PUBLIC SCHOOL 11	6.0	N	1090231
K	116m NE	257445 665795	KENT ROAD	6.0	N	1087330
K	120m NE	257430 665810	KENT ROAD PUBLIC SCHOOL 6	7.0	N	1090226
I	124m N	257390 665830	KENT ROAD PUBLIC SCHOOL 9	7.0	N	1090229
K	125m NE	257440 665810	BERKELEY STREET 3	6.0	N	1090147
L	126m S	257370 665460	ANDERSTON REDEVELOPMENT AREA	7.0	N	1091689
M	128m N	257310 665830	BRECHIN STREET GLASGOW 2	-	Y	N/A
K	131m NE	257450 665810	BERKELEY STREET 4	6.0	N	1090148
K	131m NE	257450 665810	KENT ROAD PUBLIC SCHOOL 1	6.0	N	1090221
M	132m N	257290 665830	BRECHIN STREET GLASGOW 3	-	Y	N/A
I	133m N	257380 665840	KENT ROAD 13	8.0	N	1090233
I	133m N	257380 665840	KENT ROAD 12	7.0	N	1090232
I	133m N	257380 665840	KENT ROAD 14	7.0	N	1090234
K	133m NE	257420 665830	KENT ROAD PUBLIC SCHOOL 5	6.0	N	1090225
9	134m SW	257180 665500	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 418	15.24	N	1097025



ID	Location	Grid reference	Name	Length	Confidential	Web link
L	136m S	257370 665450	ANDERSTON REDEV BORE	7.0	N	1087445
K	137m NE	257460 665810	KENT ROAD PUBLIC SCHOOL 3	8.0	N	1090223
N	141m NW	257193 665802	CLYDESIDE EXPRESSWAY	6.0	N	1089869
M	143m N	257340 665850	KENT ROAD PUBLIC SCHOOL 10	5.0	N	1090230
M	145m N	257322 665849	BRECHIN STREET	26.0	N	1088480
O	148m N	257241 665833	ANDERSTON BERKELEY S6	6.0	N	1095647
N	148m NW	257200 665815	CLYDESIDE EXPRESSWAY	6.0	N	1089868
M	149m N	257300 665850	BRECHIN STREET GLASGOW 1	-	Y	N/A
O	149m N	257241 665835	ANDERSTON (BERKELEY ST NO. 2)	6.0	N	1095097
O	155m N	257240 665840	BERKELEY STREET GLASGOW TP1	-	Y	N/A
P	159m S	257320 665430	FINNIESTON BRIDGE 1	17.0	N	1089788
Q	161m N	257420 665860	KENT ROAD PUBLIC SCHOOL 4	7.0	N	1090224
Q	161m NE	257460 665840	KENT ROAD PUBLIC SCHOOL 2	4.0	N	1090222
10	164m E	257520 665590	ANDERSTON CROSS PHASE 5 + 5A	25.0	N	1092522
11	164m SW	257170 665470	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 419	28.0	N	1097026
O	164m N	257240 665850	BERKELEY STREET GLASGOW TP8	-	Y	N/A
O	164m N	257240 665850	BERKELEY STREET GLASGOW 1	-	Y	N/A
Q	164m NE	257450 665850	BERKELEY STREET 2	6.0	N	1090146
Q	165m N	257430 665860	BERKELEY STREET 1	6.0	N	1090145
O	165m N	257270 665860	BERKELEY STREET GLASGOW 2	-	Y	N/A
O	167m N	257230 665850	BERKELEY STREET GLASGOW TP2	-	Y	N/A
R	168m NW	257204 665840	ANDERSTON BERKELEY S7	6.0	N	1095648
O	168m N	257260 665860	BERKELEY STREET GLASGOW TP7	-	Y	N/A
S	168m S	257230 665440	CLYDESIDE EXPRESS	22.0	N	1089932
R	169m NW	257204 665842	ANDERSTON (BERKELEY ST NO. 2)	6.0	N	1095098
O	171m N	257250 665860	BERKLEY STREET, GLASGOW 1	11.0	N	1096101
P	173m S	257300 665420	FINNIESTON BRIDGE 2	11.0	N	1089789
O	173m N	257280 665870	BERKELEY STREET GLASGOW TP6	-	Y	N/A



ID	Location	Grid reference	Name	Length	Confidential	Web link
S	173m S	257250 665430	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 422D	22.0	N	1097049
O	174m N	257240 665860	BERKELEY STREET GLASGOW TP3	-	Y	N/A
O	175m N	257236 665860	ANDERSTON BERKELEY S3	6.0	N	1095644
O	175m N	257270 665870	BERKLEY STREET, GLASGOW 2	9.0	N	1096102
O	175m N	257270 665870	BERKELEY STREET GLASGOW TP5	-	Y	N/A
O	176m N	257235 665861	ANDERSTON (BERKELEY ST NO. 2)	6.0	N	1095094
T	177m S	257380 665410	ANDERSTON	17.0	N	1091714
12	177m N	257310 665880	BERKELEY STREET GLASGOW 2	-	Y	N/A
O	177m N	257274 665873	ANDERSTON BERKELEY S5	7.0	N	1095646
O	178m N	257260 665870	BERKELEY STREET GLASGOW TP4	-	Y	N/A
P	178m S	257320 665410	FINNIESTON BRIDGE 3	10.0	N	1089790
O	178m N	257273 665874	ANDERSTON (BERKELEY ST NO. 2)	7.0	N	1095096
U	179m E	257551 665693	CLYDESIDE EXPRESSWAY	6.0	N	1089880
U	180m E	257550 665675	CLYDESIDE EXPRESSWAY	6.0	N	1089881
13	181m W	257110 665755	ST VINCENT CRESC	10.0	N	1087251
U	181m E	257553 665710	CLYDESIDE EXPRESSWAY	6.0	N	1089879
V	182m N	257350 665890	BERKELEY STREET GLASGOW 3	-	Y	N/A
V	182m N	257348 665890	BERKLEY STREET 1	-	Y	N/A
P	182m S	257300 665410	FINNIESTON BRIDGE 4	9.0	N	1089791
S	183m S	257210 665430	CLYDESIDE EXPRESS	2.0	N	1089929
V	184m N	257368 665892	BERKLEY STREET TP2	-	Y	N/A
T	186m S	257370 665400	ANDERSTON REDEV BORE	11.0	N	1087452
P	187m S	257280 665410	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 424	19.0	N	1097029
V	187m N	257332 665893	BERKLEY STREET TP1	-	Y	N/A
U	188m E	257560 665710	DOVER STREET/BREADALBANE STREET GLASGOW 1	-	Y	N/A
U	188m E	257560 665690	DOVER STREET/BREADALBANE STREET GLASGOW 4	-	Y	N/A



ID	Location	Grid reference	Name	Length	Confidential	Web link
14	188m E	257550 665620	ANDERSTON CROSS PHASE 5 + 5A	14.0	N	1092523
S	190m S	257220 665420	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 422A	2.0	N	1097046
S	192m S	257210 665420	CLYDESIDE EXPRESS	3.0	N	1089930
O	193m N	257282 665891	ANDERSTON BERKELEY S4	8.0	N	1095645
O	195m N	257270 665890	BERKELEY STREET GLASGOW 1	-	Y	N/A
T	195m S	257350 665390	ANDERSTON	10.0	N	1091710
O	196m N	257270 665891	ANDERSTON (BERKELEY ST NO. 2)	8.0	N	1095095
W	196m E	257550 665570	ANDERSTON CROSS PHASE 5 + 5A	32.0	N	1092517
S	197m S	257230 665410	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 422B	3.0	N	1097047
X	198m NW	257197 665870	ANDERSTON BERKELEY S2	5.0	N	1095643
Y	198m SW	257110 665480	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 416	22.0	N	1097024
P	198m S	257320 665390	FINNIESTON BRIDGE 5	9.0	N	1089792
S	198m SW	257170 665430	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 420	18.0	N	1097027
S	199m S	257190 665420	CLYDESIDE EXPRESS	19.0	N	1089931
Z	200m SE	257480 665430	FINNIESTON	38.0	N	1087753
X	200m NW	257197 665872	ANDERSTON (BERKELEY ST NO. 2)	5.0	N	1095093
Z	201m SE	257470 665420	FINNIESTON	46.0	N	1087710
S	202m S	257210 665410	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 422C	19.0	N	1097048
P	202m S	257300 665390	FINNIESTON BRIDGE 6	9.0	N	1089793
Z	204m SE	257440 665400	FINNIESTON	45.0	N	1087704
U	208m E	257580 665700	DOVER STREET/BREADALBANE STREET GLASGOW 3	-	Y	N/A
15	208m S	257390 665380	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 433	32.0	N	1097038
U	208m E	257580 665710	DOVER STREET/BREADALBANE STREET GLASGOW 2	-	Y	N/A
S	210m S	257185 665410	GLASGOW QUEENS DOCK	12.0	N	1093234



ID	Location	Grid reference	Name	Length	Confidential	Web link
W	211m E	257565 665570	ANDERSTON REDEV BORE	6.0	N	1087447
AA	212m NW	257145 665855	KELVINGROVE STREET	7.0	N	1087256
Z	213m SE	257500 665430	ANDERSTON	15.0	N	1091716
AA	213m NW	257160 665867	ANDERSTON BERKELEY S8	6.0	N	1095649
P	214m S	257290 665380	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 425	18.0	N	1097030
AA	215m NW	257160 665869	ANDERSTON (BERKELEY ST NO. 2)	6.0	N	1095099
AA	216m NW	257140 665855	CLYDESIDE EXPRESSWAY	6.0	N	1089867
W	217m E	257570 665560	ANDERSTON REDEVELOPMENT AREA	6.0	N	1091691
P	218m S	257320 665370	FINNIESTON BRIDGE 7	9.0	N	1089794
Z	218m SE	257502 665425	PORT STREET 2	-	Y	N/A
Z	218m SE	257470 665400	FINNIESTON	45.0	N	1087709
AA	218m NW	257150 665866	CLYDESIDE EXPRESSWAY	6.0	N	1089866
Y	218m SW	257100 665460	CLYDESIDE EXPRESSWAY 417	10.97	N	17926945
Z	218m S	257430 665380	ANDERSTON REDEVELOPMENT AREA	7.0	N	1091683
16	219m NE	257460 665906	BERKELEY STREET 1	24.0	N	1088432
Z	222m SE	257460 665390	FINNIESTON	46.0	N	1087705
Z	224m SE	257480 665400	FINNIESTON	45.0	N	1087716
P	225m S	257340 665360	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 430	25.0	N	1097035
AB	225m S	257370 665360	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 431	5.0	N	1097036
P	229m S	257310 665360	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 426	15.0	N	1097031
AA	230m NW	257150 665880	KELVINGROVE STREET	4.0	N	1087245
AC	231m W	257049 665518	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 413	9.0	N	1097021
Z	232m SE	257480 665390	FINNIESTON	45.0	N	1087715
Z	232m SE	257480 665390	FINNIESTON	45.0	N	1087708
Z	232m SE	257480 665390	FINNIESTON	60.0	N	1087712
P	233m S	257290 665360	FINNIESTON BRIDGE 8	22.0	N	1089795

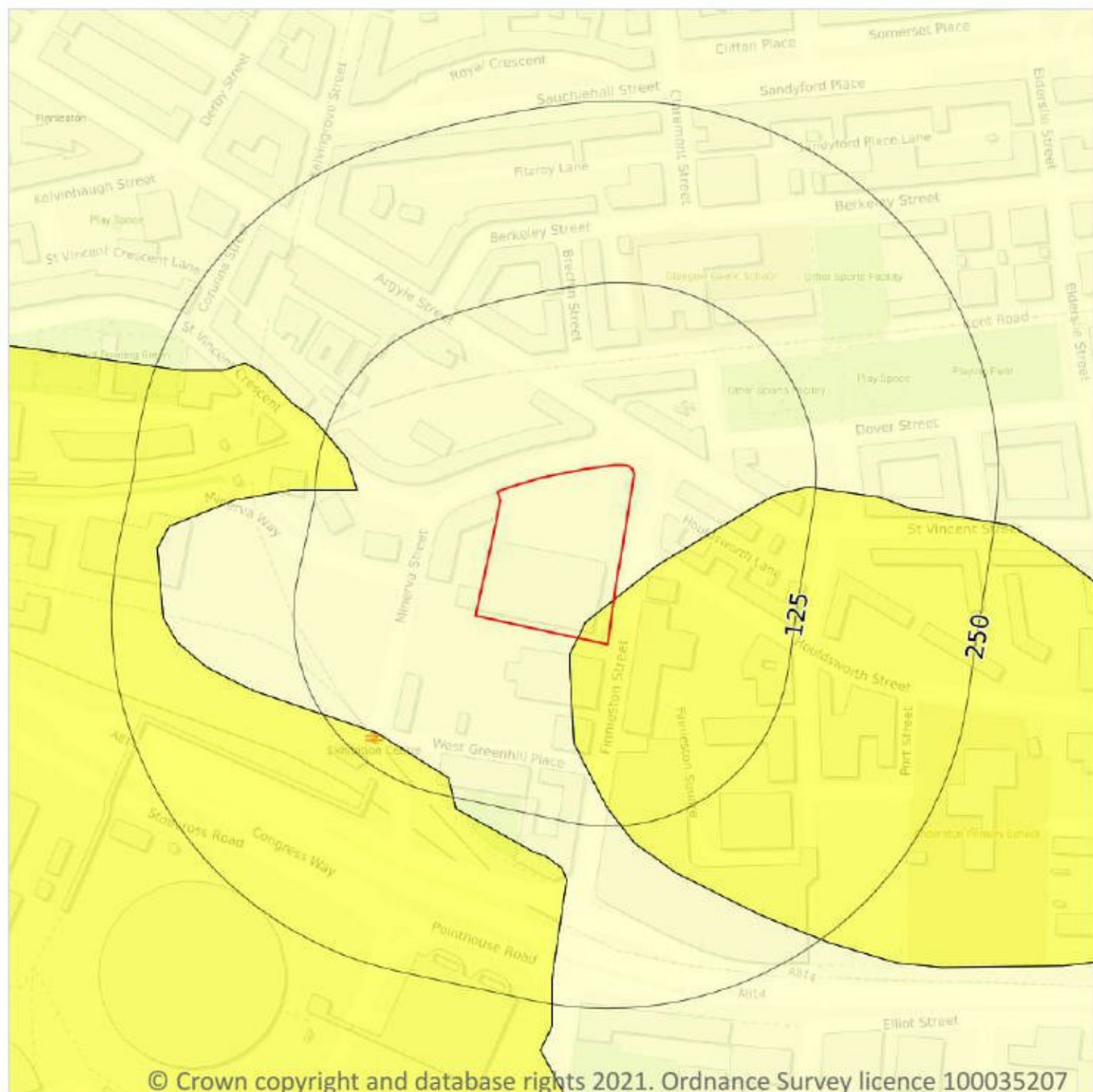


ID	Location	Grid reference	Name	Length	Confidential	Web link
AD	233m NW	257177 665900	ANDERSTON BERKELEY S1	6.0	N	1095642
AC	234m SW	257050 665510	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 414	9.0	N	1097022
AD	234m NW	257177 665901	ANDERSTON (BERKELEY ST NO. 2)	6.0	N	1095092
Z	235m SE	257470 665380	FINNIESTON	45.0	N	1087707
Z	235m SE	257470 665380	ANDERSTON REDEV BORE	11.0	N	1087451
P	237m S	257320 665350	FINNIESTON BRIDGE 9	10.0	N	1089796
Z	239m SE	257511 665405	PORT STREET TP213	-	Y	N/A
AE	239m S	257183 665380	RIVER CLYDE (GLASGOW) PBH7	1.3	N	18650896
AE	240m S	257180 665380	RIVER CLYDE (GLASGOW) PBH7A	4.9	N	18650898
Z	240m SE	257480 665380	FINNIESTON	45.0	N	1087714
Z	240m SE	257480 665380	FINNIESTON	36.0	N	1087713
17	243m NE	257590 665810	KENT ROAD	9.0	N	1087335
18	244m E	257615 665724	DOVER ST/PEMBROKE ST, GLASGOW	-	Y	N/A
AB	245m S	257360 665340	CLYDERAIL KELVINHAUGH BURROWLINE JUNCTION 432	5.0	N	1097037
Z	247m SE	257524 665406	PORT STREET TP5	-	Y	N/A
Z	247m SE	257520 665402	PORT STREET 5	-	Y	N/A
19	249m SE	257544 665424	PORT STREET 1	-	Y	N/A
P	249m S	257310 665340	FINNIESTON BRIDGE 11	10.0	N	1089798
Z	249m SE	257480 665370	FINNIESTON	45.0	N	1087711

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).

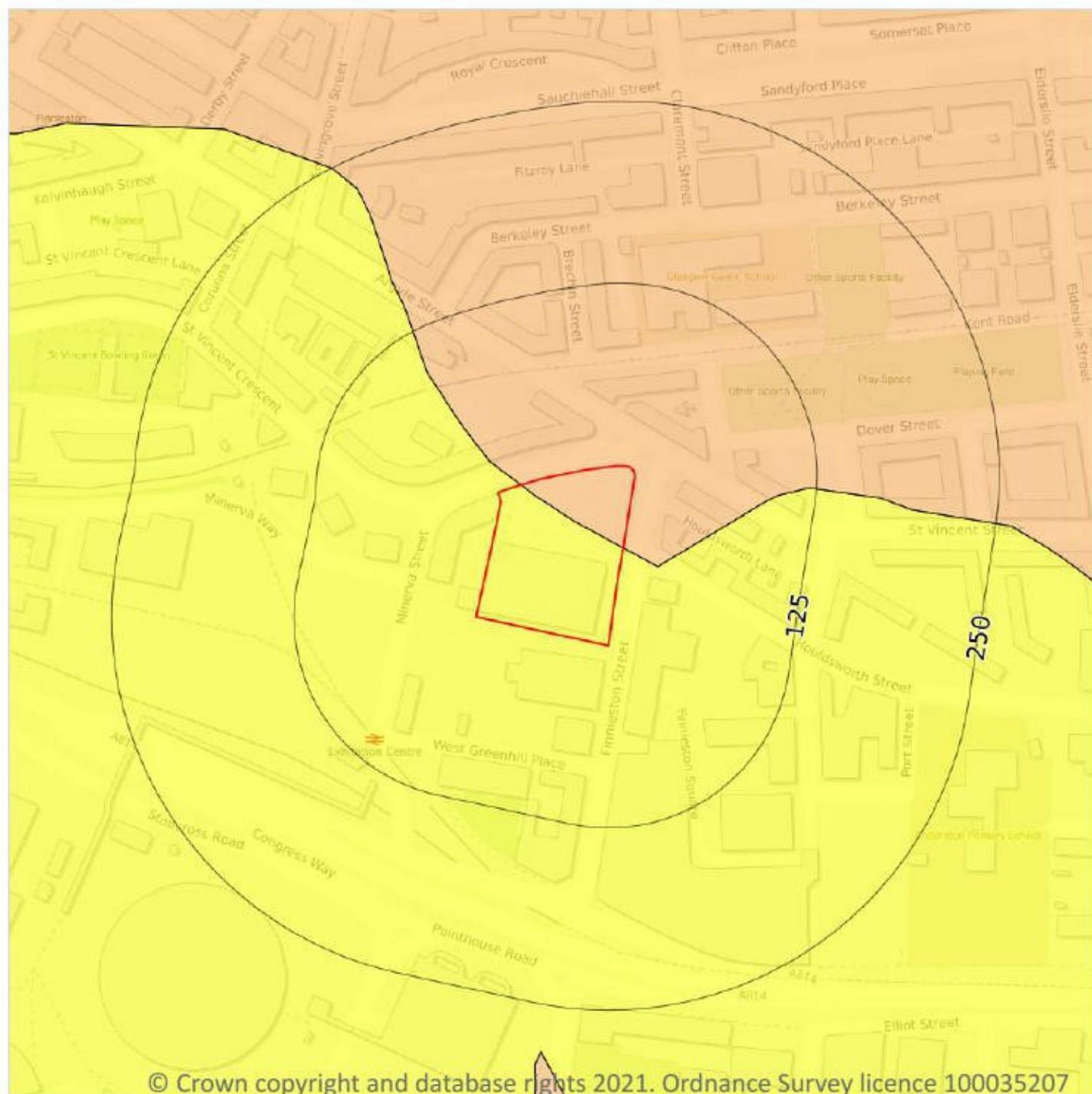
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 89**

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
On site	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



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 90**

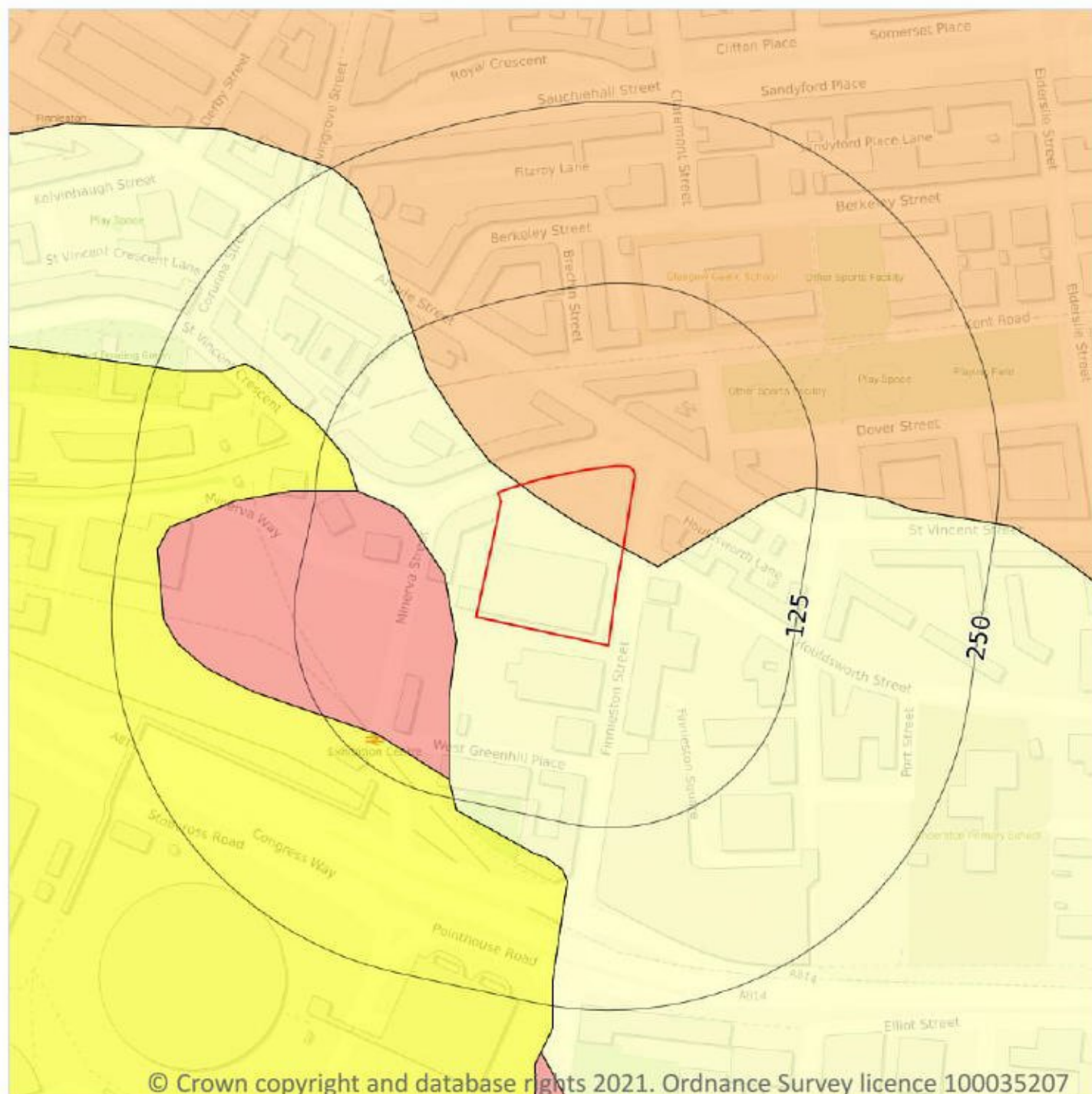
Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

Location	Hazard rating	Details
On site	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

3

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 92**

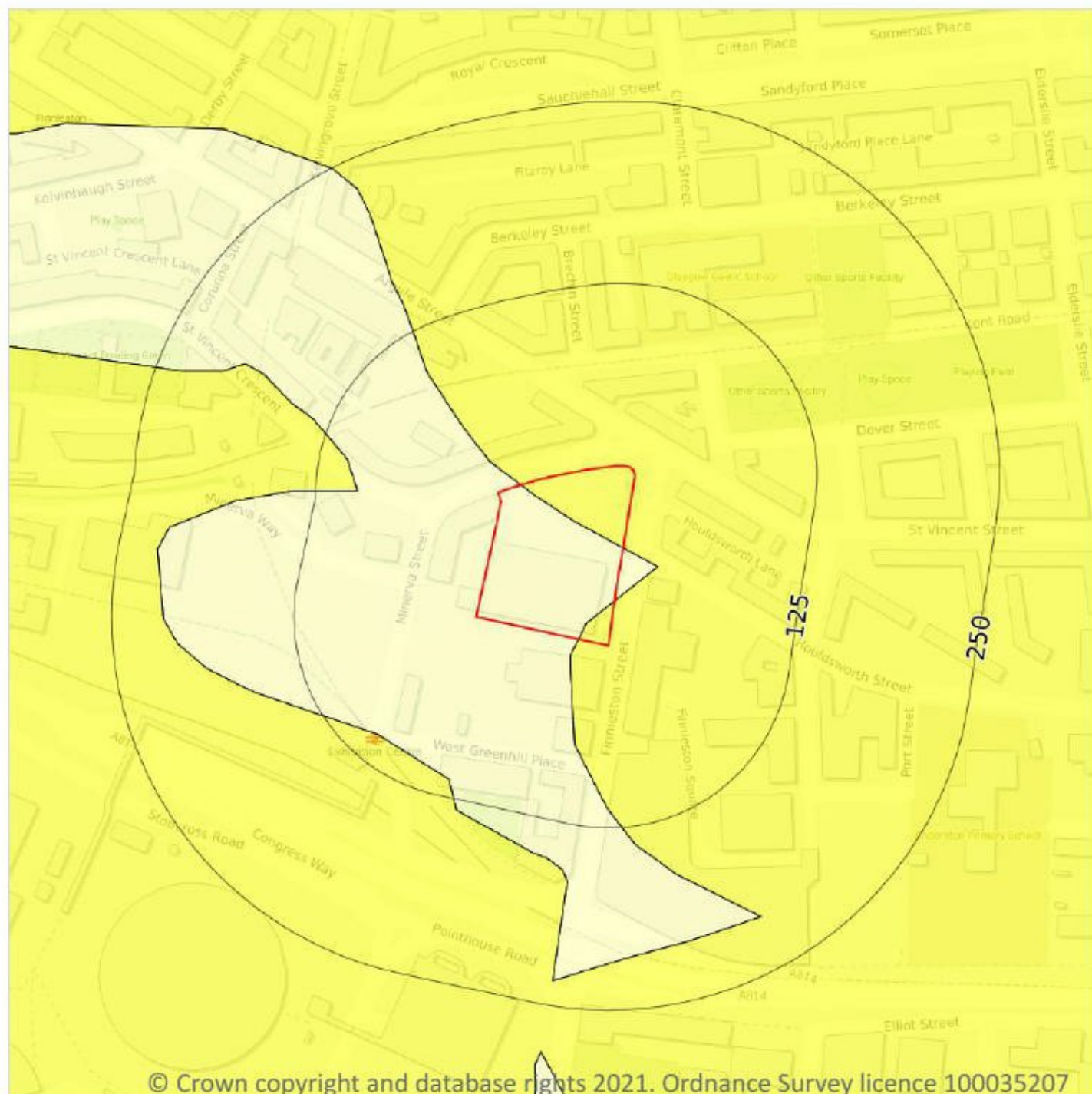
Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
On site	Low	Compressibility and uneven settlement potential may be present. Land use should consider specifically the compressibility and variability of the site.

Location	Hazard rating	Details
16m W	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



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.

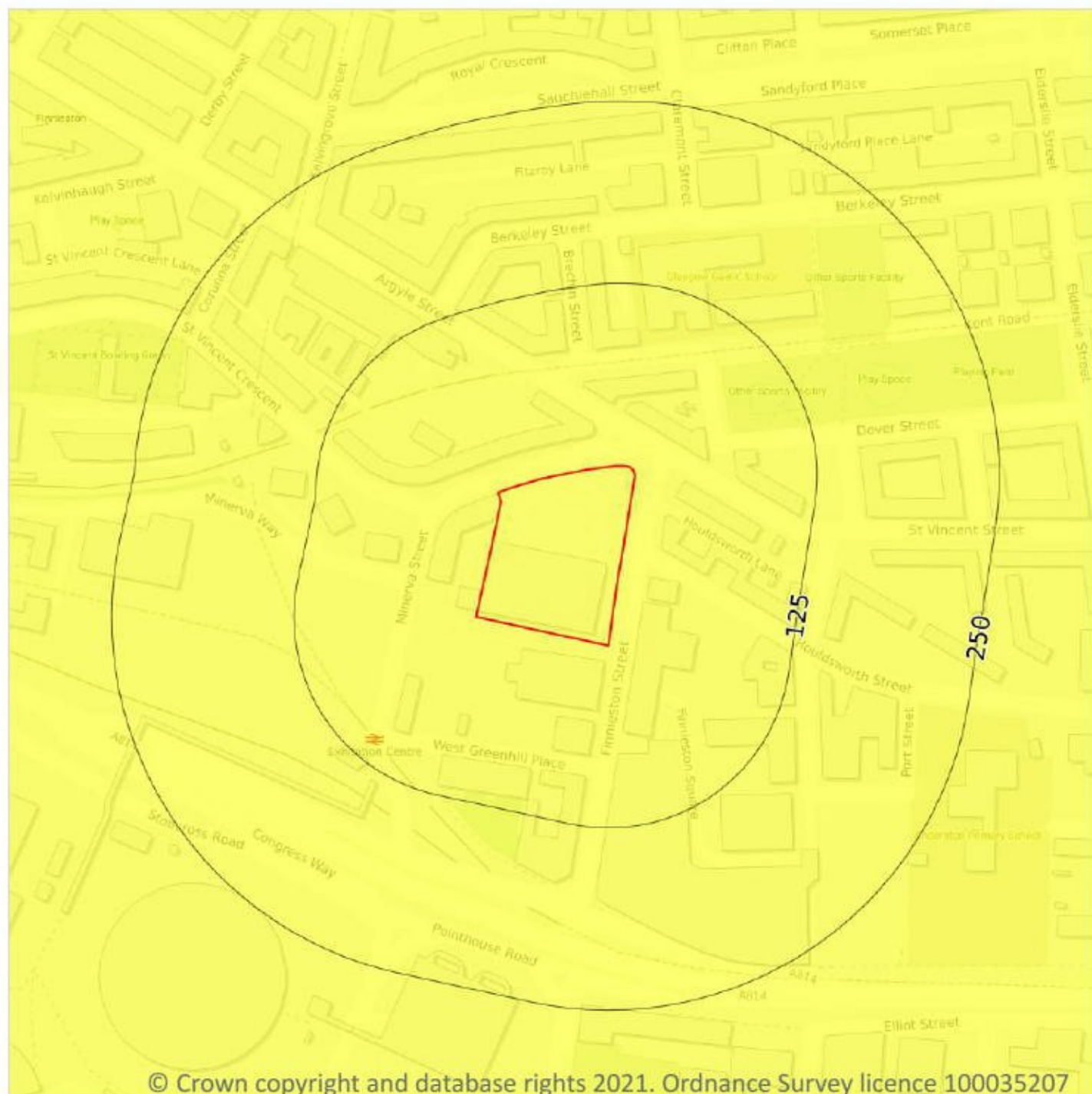
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 94**

Location	Hazard rating	Details
On site	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.
On site	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



17.5 Landslides

Records within 50m

1

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 95**

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.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

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.

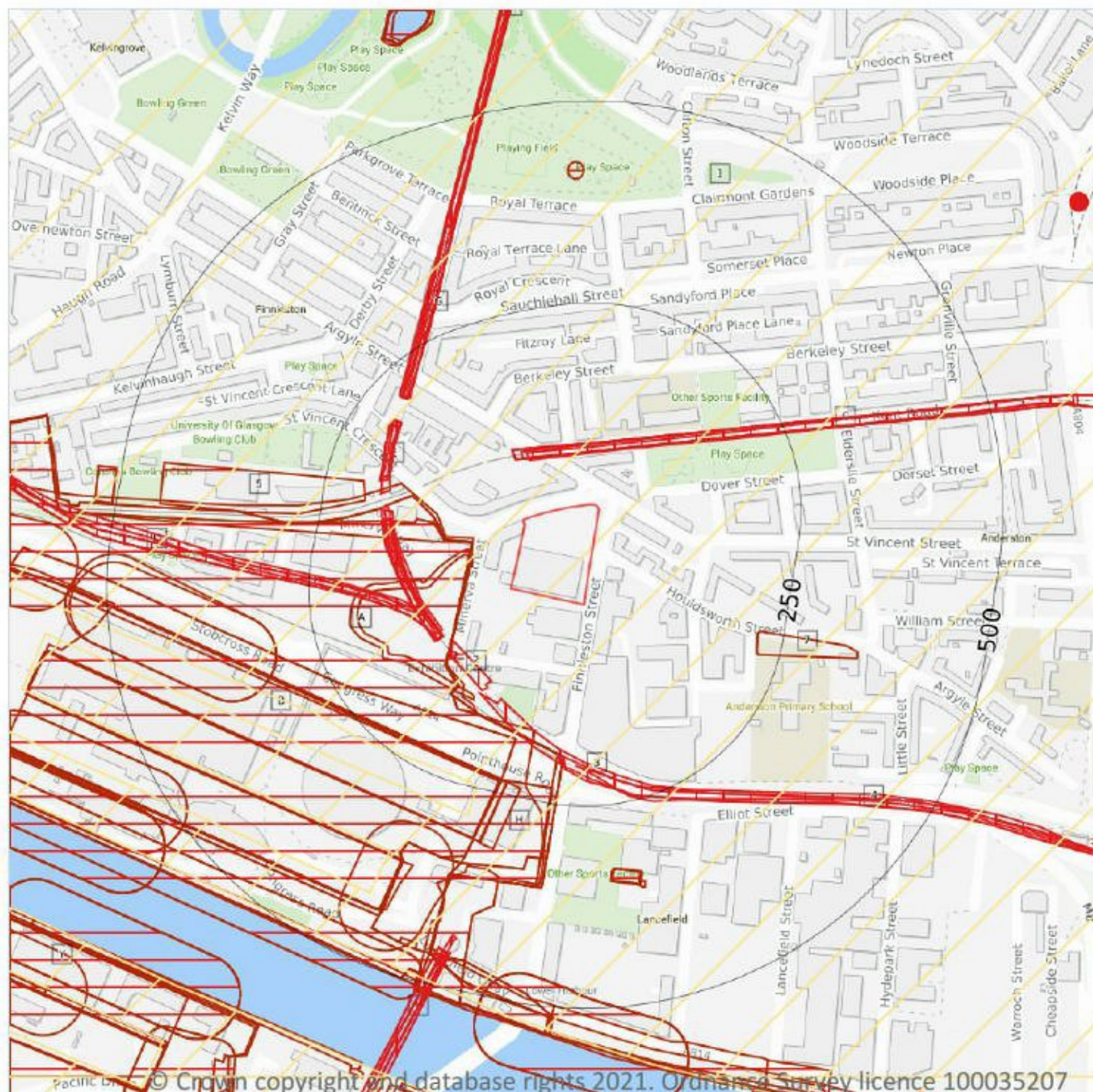
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 96**

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.

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 Peter Brett Associates (PBA).

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

15

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 97**

ID	Location	Land Use	Year of mapping	Mapping scale
A	53m W	Unspecified Ground Workings	1864	1:10560
B	55m W	Dock	1982	1:10000
B	58m W	Dock	1897	1:10560
B	58m W	Dock	1938	1:10560
B	58m W	Dock	1910	1:10560
B	59m W	Dock	1956	1:10560
B	59m W	Dock	1973	1:10000
B	176m S	Quay	1938	1:10560
B	176m S	Quay	1910	1:10560
5	197m W	Loch	1910	1:10560
7	218m E	Ponds	1864	1:10560
H	231m S	Quay	1938	1:10560
H	231m S	Quay	1910	1:10560
H	234m S	Quay	1956	1:10560
H	235m S	Quay	1973	1:10000

This is data is sourced from Ordnance Survey/Groundsure.



18.4 Underground workings

Records within 1000m

58

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 97**

ID	Location	Land Use	Year of mapping	Mapping scale
C	64m N	Tunnel	1910	1:10560
C	65m N	Tunnel	1994	1:10000
C	65m N	Tunnel	1982	1:10000
C	65m N	Tunnel	1973	1:10000
C	65m N	Tunnel	1956	1:10560
2	96m SW	Tunnel	1938	1:10560
A	99m SW	Tunnel	1938	1:10560
A	103m SW	Tunnel	1956	1:10560
A	103m SW	Tunnel	1994	1:10000
A	103m SW	Tunnel	1982	1:10000
A	103m SW	Tunnel	1973	1:10000
D	103m SW	Tunnel	1994	1:10000
D	103m SW	Tunnel	1982	1:10000
D	103m SW	Tunnel	1973	1:10000
A	105m SW	Tunnel	1910	1:10560
D	114m W	Tunnel	1938	1:10560
3	136m S	Tunnel	1938	1:10560
E	168m W	Tunnel	1982	1:10000
E	168m W	Tunnel	1973	1:10000
E	174m W	Tunnel	1938	1:10560
E	174m W	Tunnel	1910	1:10560
E	175m W	Tunnel	1956	1:10560
4	190m S	Tunnel	1910	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
6	201m S	Tunnel	1956	1:10560
F	206m NW	Tunnel	1994	1:10000
F	206m NW	Tunnel	1982	1:10000
F	206m NW	Tunnel	1973	1:10000
G	206m NW	Tunnel	1938	1:10560
G	206m NW	Tunnel	1910	1:10560
F	208m NW	Tunnel	1956	1:10560
L	374m N	Tunnel	1938	1:10560
L	374m N	Tunnel	1909	1:10560
L	374m N	Tunnel	1894	1:10560
N	435m S	Tunnel	1956	1:10560
N	453m S	Tunnel	1938	1:10560
N	453m S	Tunnel	1910	1:10560
N	455m S	Tunnel	1982	1:10000
N	455m S	Tunnel	1973	1:10000
N	457m S	Tunnel	1938	1:10560
N	457m S	Tunnel	1910	1:10560
11	585m W	Tunnel	1910	1:10560
-	696m E	Tunnel	1994	1:10000
-	696m E	Tunnel	1982	1:10000
-	696m E	Tunnel	1973	1:10000
-	752m E	Tunnel	1956	1:10560
-	755m W	Tunnel	1994	1:10000
-	755m W	Tunnel	1982	1:10000
-	755m W	Tunnel	1973	1:10000
-	757m W	Tunnel	1938	1:10560
-	757m W	Tunnel	1910	1:10560
-	757m E	Tunnel	1938	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
-	757m E	Tunnel	1910	1:10560
-	760m SE	Tunnel	1994	1:10000
-	760m SE	Tunnel	1982	1:10000
-	760m SE	Tunnel	1973	1:10000
-	904m NW	Tunnel	1938	1:10560
-	904m NW	Tunnel	1909	1:10560
-	904m NW	Tunnel	1894	1:10560

This is 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

5

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).

Features are displayed on the Mining, ground workings and natural cavities map on **page 97**

ID	Location	Name	Commodity	Class	Likelihood
1	On site	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
12	603m S	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered



ID	Location	Name	Commodity	Class	Likelihood
Y	614m SW	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
14	623m S	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
17	777m SW	Not available	Vein Mineral	A	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

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 Peter Brett Associates (PBA).

18.8 JPB mining areas

Records on site

0

Areas which could be affected by former coal 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

1

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

Location	Details
On site	The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report is recommended to further assess coal mining issues at the site. This can be ordered directly through Groundsure or your preferred search provider.



This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site

0

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.

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 Mining Searches UK.

18.13 Clay mining

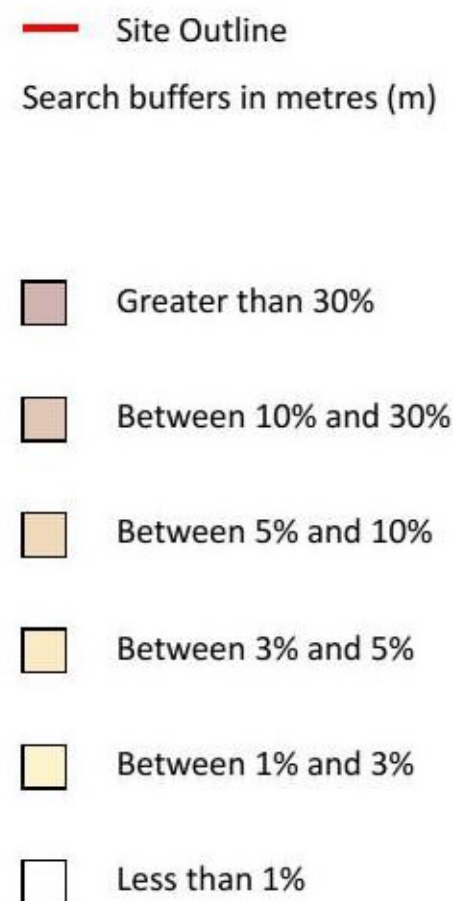
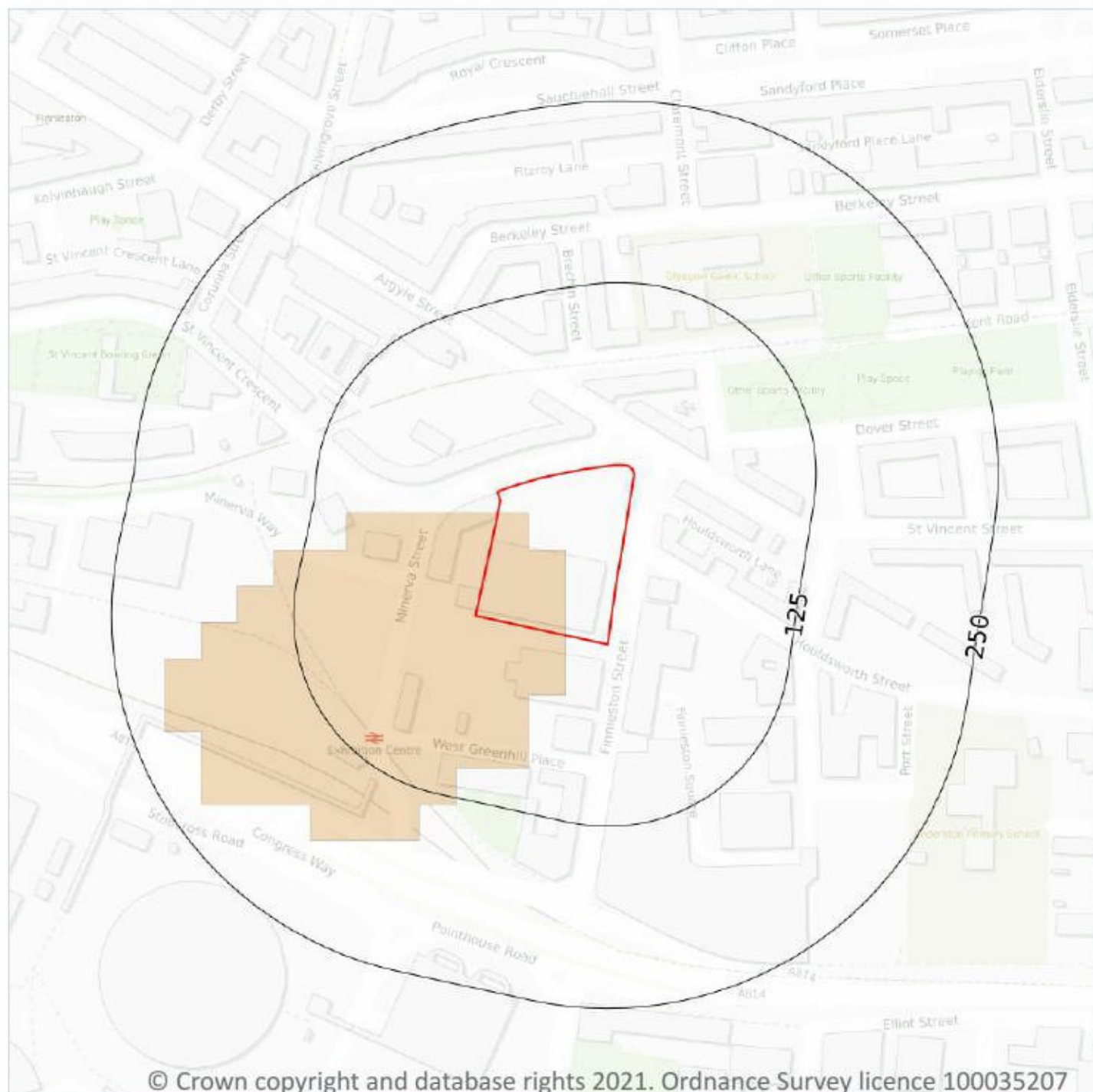
Records on site

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

2

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	Between 5% and 10%	Stage 1
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

9

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	-	600 - 1200 mg/kg	360 - 720 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	-	600 - 1200 mg/kg	360 - 720 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	-	600 - 1200 mg/kg	360 - 720 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	-	600 - 1200 mg/kg	360 - 720 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	-	600 - 1200 mg/kg	360 - 720 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	-	600 - 1200 mg/kg	360 - 720 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
16m SW	15 mg/kg	-	600 - 1200 mg/kg	360 - 720 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
17m W	15 mg/kg	-	600 - 1200 mg/kg	360 - 720 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
29m SW	15 mg/kg	-	600 - 1200 mg/kg	360 - 720 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	9
--------------------	---

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).

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
On site	10	1.8	177	122	0.3	79	63	32	9
On site	8	1.4	151	104	0.3	87	55	31	9
On site	9	1.6	102	70	0.3	74	40	28	8
On site	9	1.6	187	128	0.3	79	66	30	9
On site	9	1.6	110	76	0.3	82	40	29	8
3m NW	9	1.6	94	65	0.3	75	40	29	7
28m E	11	1.9	192	132	0.6	88	77	38	16
28m NE	12	2.1	202	139	0.6	88	83	39	16
43m SE	10	1.8	207	142	0.5	90	86	39	19

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

2

Railway tunnels taken from contemporary Ordnance Survey mapping.

Features are displayed on the Railway infrastructure and projects map on **page 108**

Location	Type
71m N	Railway Tunnel
194m S	Railway Tunnel

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m

108

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.

Features are displayed on the Railway infrastructure and projects map on **page 108**

Location	Land Use	Year of mapping	Mapping scale
58m W	Railway Sidings	1897	10560
58m W	Railway Sidings	1938	10560
58m W	Railway Sidings	1910	10560
64m N	Tunnel	1910	10560
65m N	Tunnel	1994	10000
65m N	Tunnel	1982	10000
65m N	Tunnel	1973	10000
65m N	Tunnel	1956	10560
66m N	Tunnel	1994	1250
66m N	Tunnel	1995	1250
67m N	Tunnel	1969	1250
67m N	Tunnel	1951	1250



Location	Land Use	Year of mapping	Mapping scale
67m N	Tunnel	1949	1250
67m N	Tunnel	1962	2500
67m N	Tunnel	1950	2500
67m N	Railway Sidings	1913	2500
67m N	Railway Sidings	1934	2500
67m N	Tunnel	1983	1250
67m N	Tunnel	1989	1250
67m N	Tunnel	1991	1250
74m N	Railway Sidings	1896	2500
77m W	Railway Sidings	1951	1250
77m W	Railway Sidings	1949	1250
78m W	Railway Sidings	1956	10560
78m W	Railway Sidings	1962	2500
78m W	Railway Sidings	1950	2500
87m W	Railway Sidings	1969	1250
96m SW	Tunnel	1938	10560
99m SW	Tunnel	1938	10560
101m SW	Tunnel	1913	2500
101m SW	Tunnel	1934	2500
101m SW	Tunnel	1962	2500
101m SW	Tunnel	1950	2500
102m SW	Tunnel	1969	1250
102m SW	Tunnel	1951	1250
102m SW	Tunnel	1949	1250
102m SW	Tunnel	1994	1250
102m SW	Tunnel	1995	1250
102m SW	Tunnel	1983	1250
102m SW	Tunnel	1989	1250



Location	Land Use	Year of mapping	Mapping scale
102m SW	Tunnel	1991	1250
103m SW	Tunnel	1956	10560
103m SW	Tunnel	1994	10000
103m SW	Tunnel	1982	10000
103m SW	Tunnel	1973	10000
105m SW	Tunnel	1910	10560
114m W	Tunnel	1938	10560
126m SW	Railway Sidings	1951	1250
126m SW	Railway Sidings	1949	1250
126m W	Railway Sidings	1969	1250
132m SW	Railway Sidings	1959	1250
132m SW	Railway Sidings	1951	1250
132m SW	Railway Sidings	1950	1250
136m S	Tunnel	1938	10560
144m SW	Railway Sidings	1959	1250
144m SW	Railway Sidings	1951	1250
144m SW	Railway Sidings	1950	1250
151m S	Railway Sidings	1983	1250
154m NE	Tunnel	1995	1250
154m NE	Tunnel	1974	1250
154m NE	Tunnel	1949	1250
154m NE	Tunnel	1951	1250
155m NE	Tunnel	1979	1250
155m NE	Tunnel	1990	1250
159m S	Railway Sidings	1950	2500
162m S	Railway Sidings	1959	1250
162m S	Railway Sidings	1951	1250
162m S	Railway Sidings	1950	1250



Location	Land Use	Year of mapping	Mapping scale
168m W	Tunnel	1982	10000
168m W	Tunnel	1973	10000
170m W	Tunnel	1950	2500
172m W	Tunnel	1913	2500
173m W	Tunnel	1962	2500
173m W	Tunnel	1994	1250
173m W	Tunnel	1995	1250
173m W	Tunnel	1969	1250
173m W	Tunnel	1951	1250
173m W	Tunnel	1949	1250
174m W	Tunnel	1938	10560
174m W	Tunnel	1910	10560
174m W	Tunnel	1983	1250
174m W	Tunnel	1989	1250
174m W	Tunnel	1991	1250
175m W	Tunnel	1956	10560
187m S	Tunnel	1959	1250
187m S	Tunnel	1974	1250
187m S	Tunnel	1950	1250
187m S	Tunnel	1951	1250
189m S	Tunnel	1998	1250
190m S	Tunnel	1988	1250
190m S	Tunnel	1910	10560
201m S	Tunnel	1956	10560
202m S	Railway Sidings	1910	10560
205m NW	Tunnel	1913	2500
205m NW	Tunnel	1934	2500
206m NW	Tunnel	1994	10000



Location	Land Use	Year of mapping	Mapping scale
206m NW	Tunnel	1982	10000
206m NW	Tunnel	1973	10000
206m NW	Tunnel	1938	10560
206m NW	Tunnel	1910	10560
207m NW	Tunnel	1962	2500
207m NW	Tunnel	1950	2500
207m NW	Tunnel	1994	1250
207m NW	Tunnel	1995	1250
208m NW	Tunnel	1969	1250
208m NW	Tunnel	1951	1250
208m NW	Tunnel	1949	1250
208m NW	Tunnel	1956	10560

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

4

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

Features are displayed on the Railway infrastructure and projects map on **page 108**

Location	Description
115m W	Abandoned



Location	Description
115m W	Abandoned
146m W	Abandoned
177m W	Abandoned

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	35
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Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

Features are displayed on the Railway infrastructure and projects map on **page 108**

Location	Name	Type
66m N	North Clyde Line	rail
70m N	North Clyde Line	rail
71m N	North Clyde Line	rail
75m N	North Clyde Line	rail
77m N	Not given	Multi Track
86m NW	Not given	Multi Track
107m SW	Argyle Line	rail
107m SW	Not given	Single Track
108m SW	Argyle Line	rail
109m NW	Not given	Multi Track
112m SW	Not given	Single Track
129m W	North Clyde Line	rail
133m W	North Clyde Line	rail
134m S	Not given	Single Track
140m SW	Argyle Line	rail
145m W	North Clyde Line	rail
145m SW	-	rail
146m SW	Not given	Multi Track



Location	Name	Type
146m SW	Not given	Multi Track
146m SW	Not given	Multi Track
146m W	Not given	Multi Track
148m SW	Not given	Multi Track
149m W	North Clyde Line	rail
152m S	Not given	Multi Track
183m S	Argyle Line	rail
183m S	-	rail
185m S	Argyle Line	rail
187m S	Not given	Multi Track
188m S	Argyle Line	rail
191m S	Argyle Line	rail
196m S	Argyle Line	rail
199m S	Argyle Line	rail
208m S	Argyle Line	rail
211m S	Argyle Line	rail
250m W	North Clyde Line	rail

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

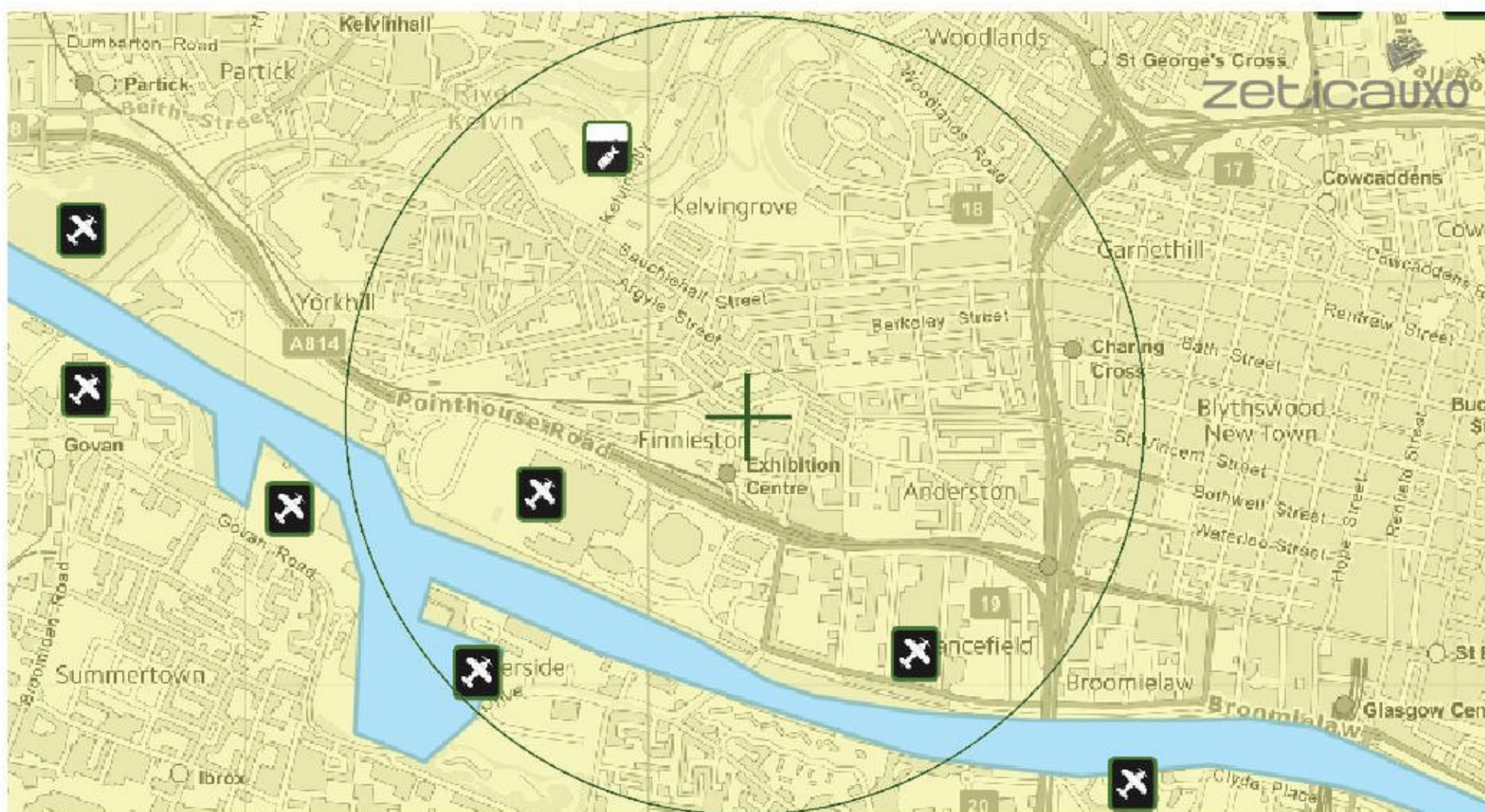
Groundsure's Terms and Conditions can be accessed at this link: <https://www.groundsure.com/terms-and-conditions-jan-2020/>.

UNEXPLODED BOMB RISK MAP



SITE LOCATION

Map Centre: 257249,665669



LEGEND

- High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- Low:** Areas indicated as having 15 bombs per 1000acre or less.

- military
- industry
- UXO find
- transport
- dock
- Luftwaffe targets
- utilities
- Bombing decoy
- other

How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment* is necessary.

What do I do if my site is in a moderate or high risk area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

If I have any questions, who do I contact?

tel: +44 (0) 1993 886682

email: uxo@zetica.com

web: www.zeticauxo.com

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (<https://zeticauxo.com/downloads-and-resources/risk-maps/>)

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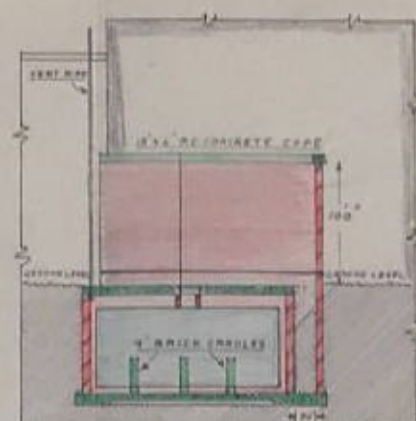
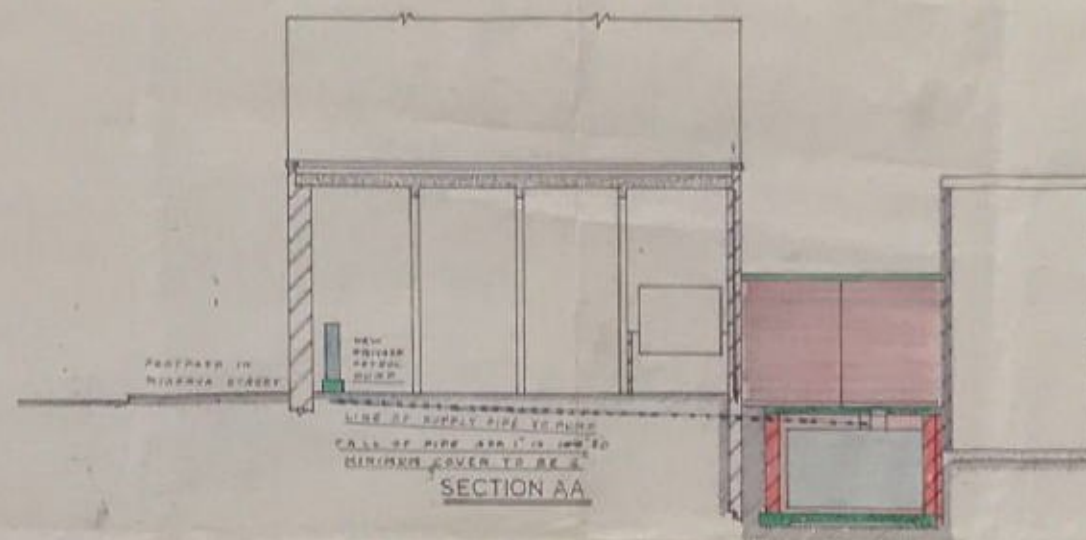
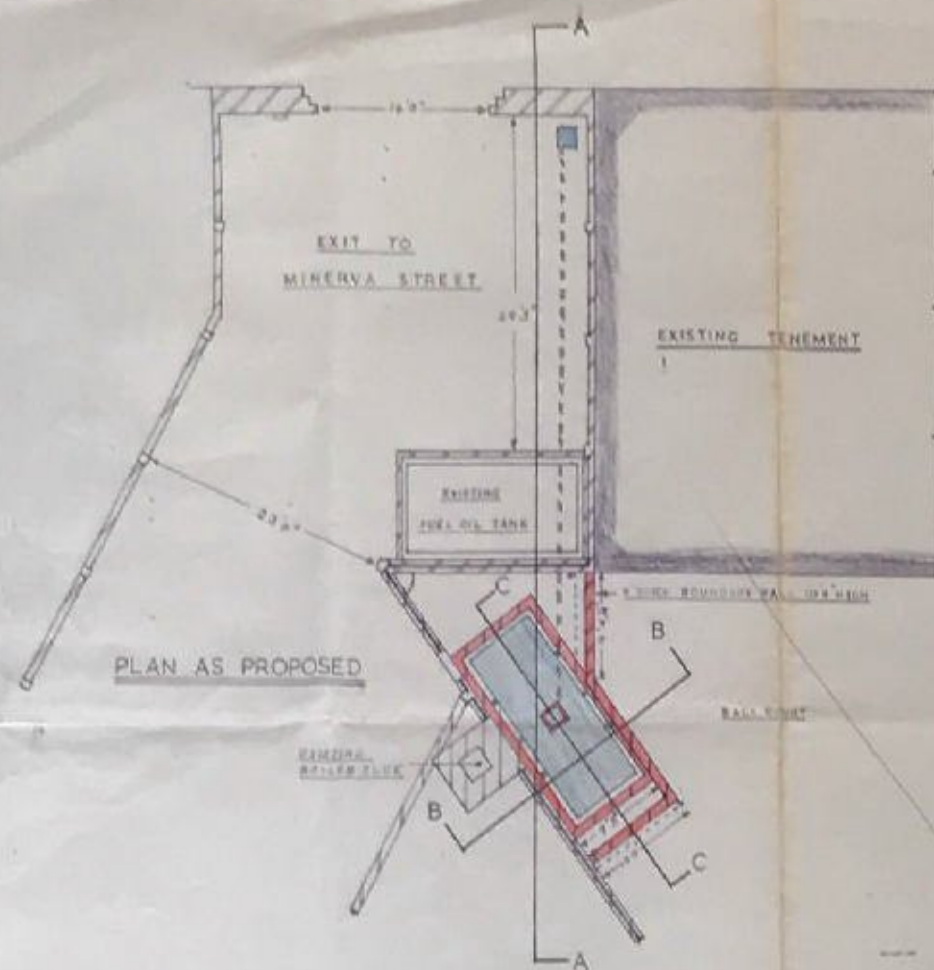
It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.

Appendix 3

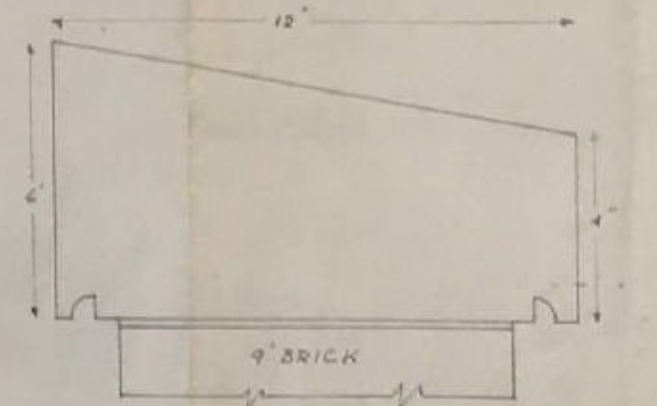
Information from the Petroleum Officer

32/50 FINNIESTON ST.
CARLAW CARS.
S
B
1.

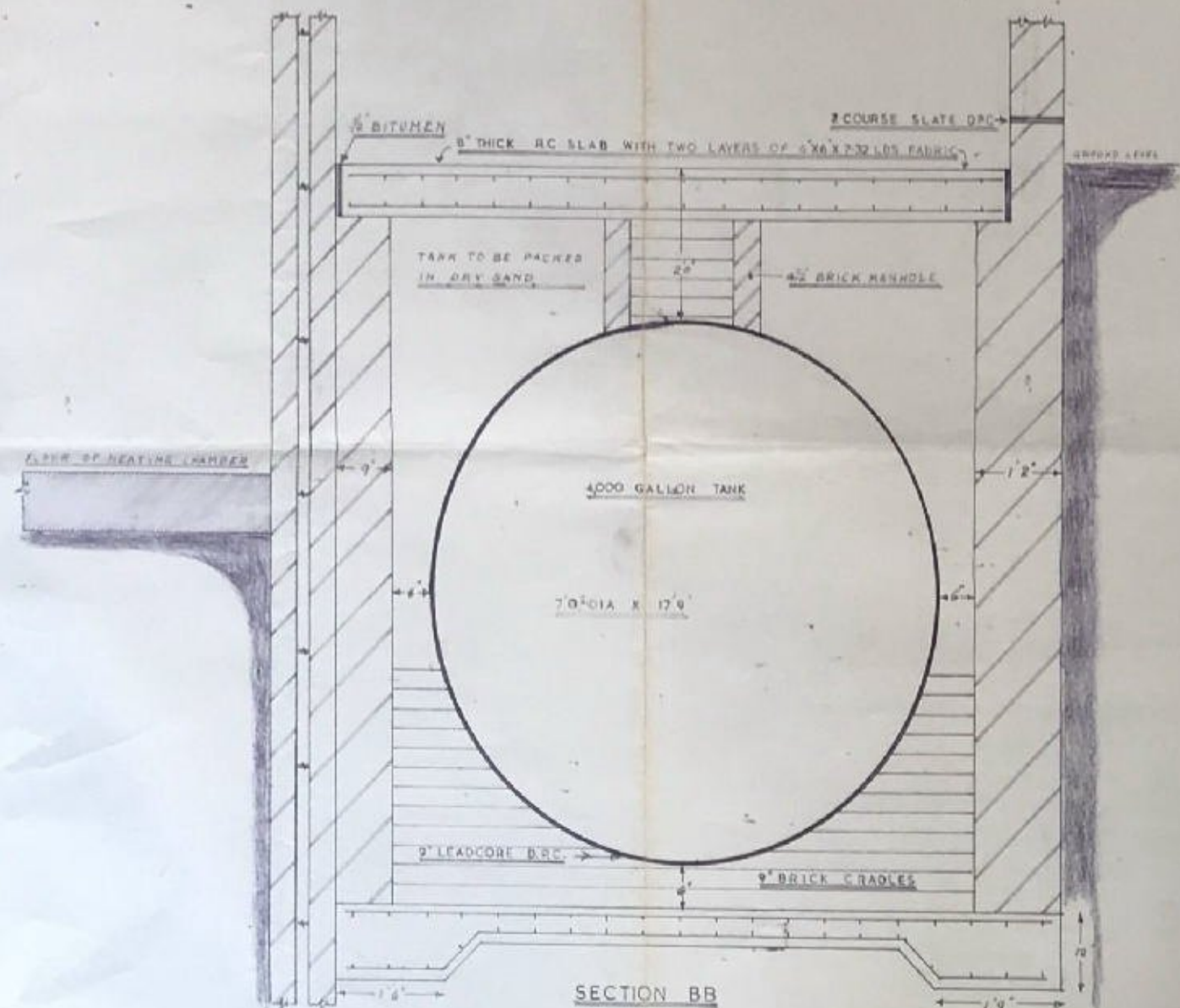


SECTION CC

INTERNAL DIMENSION OF BRICK CHAMBER:- 18" X 8" X 8" HIGH



HALF FULL SIZE SECTION OF CONCRETE COPE



SECTION BB

MESSRS CARLAW (CARS) LIMITED, 32, FINNIESTON STREET, GLASGOW, C3	
PROPOSED NEW PETROL PUMP & TANK AT REAR ENTRANCE TO GARAGE.	
SCALE: 3/16" = ONE FOOT.	PROJECT MANAGER: DROST AMICK
DATE: APRIL 1989.	MASTER OF WORKS 8 BLANE CRESCENT, BLANFIELD, GLASGOW
DRAWING No: 54.	T/L No: BLR/475

Engineering Services (Paisley) Ltd.

65 ESPEDAIR STREET

PAISLEY PA2 6RL

Telephone 041-889 1316

Reference GF 1070

CERTIFICATE OF TEST

This is to Certify that I have examined the atmosphere in
1 x 4,000 gallon tank/vessel
at Finnieston Street, Glasgow.

I am of the opinion that it is free of Hydrocarbon Vapour on the date shown below. Naked lights may be exposed internally or externally providing that the tank/vessel is above ground when the certificate is granted.

To Carlaw Cars,
32 Finnieston Street,
GLASGOW.

Certified by

Date 18 3 80

Remarks Tank must be water filled.

NOTES. A certificate is given only on the conditions governing at the time of issue. If there are any alterations in the conditions from the time of issue a further test will be necessary.

A certificate cannot be issued on a tank/vessel which remains underground, until a period of 28 days has elapsed from the date of steaming or cleaning and de-sludging.

A tank/vessel which has been subjected to steaming or cleaning may not be re-used for storage under the Petroleum (Consolidation) Act, 1928, without permission of the local Petroleum Officer.

Engineering Services (Paisley) Ltd.

86-636.

65 ESPEDAIR STREET
PAISLEY PA2 6RL
Telephone 041-889 1316

Reference GF 873

CERTIFICATE OF TEST

This is to Certify that I have examined the atmosphere in
Petrol (1 x 3000) tank/vessel
at Scottish Postal Board,
Finnieston Street, Glasgow.

I am of the opinion that it is free of Hydrocarbon Vapour on the date shown below. Naked lights may be exposed internally or externally providing that the tank/vessel is above ground when the certificate is granted.

To Scottish Postal Board,
102 West Port
Edinburgh.

Certified by

Date 6th November, 1986

Remarks

NOTES. A certificate is given only on the conditions governing at the time of issue. If there are any alterations in the conditions from the time of issue a further test will be necessary.
A certificate cannot be issued on a tank/vessel which remains underground, until a period of 28 days has elapsed from the date of steaming or cleaning and de-sludging.
A tank/vessel which has been subjected to steaming or cleaning may not be re-used for storage under the Petroleum (Consolidation) Act, 1928, without permission of the local Petroleum Officer.

ALEX MITCHELL THOMSON
ALEXA M. MITCHELL THOMSON
MRS. S. M. DREW
E. MICHAEL DREW
HUGH MORTON WRIGHT

TELEPHONE:
041-638 0906
041-638 9014

TANK CLEANERS (GLASGOW) LTD.

Reg. No. 34260 (Scotland)

INDUSTRIAL TANK CLEANING & GAS FREEING CONTRACTORS

Registered Office

ROBSLEE DRIVE · GIFFNOCK

GLASGOW · G46 7TY

V.A.T. 260 6185 68

EMD/JW 1057

29th MAY 1990

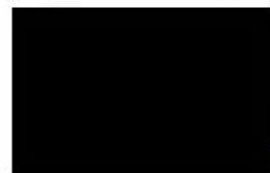
GAS FREE CERTIFICATE FOR ONE 5,000 AND ONE 3,000 GALLON DIESEL
TANKS AT EX GPO PREMISES, FINNIESTON STREET, GLASGOW.

The Tanks were emptied of water infillings on Thursday 24th MAY,
1990 and removed from the ground.

I tested samples of the atmospheres contained therein at 1430 hours
on Thursday 24th May, 1990 and at which time I CERTIFY THE TANKS
GAS FREE LYING ABOVE GROUND ON SITE.

The Tanks have since been removed from the Site.

For TANK CLEANERS (GLASGOW) LTD



E.M. Drew
Director

The Chief Petroleum Officer
Consumer Protection Department
Strathclyde Regional Council
St. Enoch House
St. Enoch Square
Glasgow G1 4BH

Copy to MacWilliam Contracts Ltd
Hollandhurst Road

ALEX MITCHELL THOMSON
ALEXA M. MITCHELL THOMSON
MRS. S. M. DREW
E. MICHAEL DREW
HUGH MORTON WRIGHT

TELEPHONE:
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Registered Office

ROBSLEE DRIVE - GIFFNOCK

GLASGOW - G46 7TY

V.A.T. 260 6185 68

EMD/JW 3448

6th JUNE 1991

GAS FREE CERTIFICATE FOR ONE 5,000 AND ONE 3,000 GALLON DIESEL
TANKS AT EX GPO PREMISES, FINNIESTON STREET, GLASGOW.

Tanks were tested below ground and found to be safe to dig out
on Tuesday 4th June, 1991.

I tested samples of the atmospheres contained therein at 1430
hours on Wednesday 5th June, 1991 and at which time I CERTIFY THE
TANKS GAS FREE LYING ABOVE GROUND ON SITE.

The Tanks will now be removed from the Site.

For TANK CLEANERS (GLASGOW) LTD



E.M. Drew
Director

The Chief Petroleum Officer
Consumer Protection Department
Strathclyde Regional Council
St. Enoch House
St. Enoch Square
Glasgow G1 4BH

Copy to:- G.A. Group Ltd
Woodside House
14 Woodside Terrace
Glasgow G2 7YU

O/Dof. MD D McNEE

ALEX MITCHELL THOMSON
ALEXA M. MITCHELL THOMSON
MRS. S. M. DREW
E. MICHAEL DREW
HUGH MORTON WRIGHT

TELEPHONE:
041-638 0906
041-638 9014

TANK CLEANERS (GLASGOW) LTD.

Reg. No. 34260 (Scotland)

INDUSTRIAL TANK CLEANING & GAS FREEING CONTRACTORS

Registered Office

ROBSLEE DRIVE · GIFFNOCK

GLASGOW · G46 7TY

V.A.T. 260 6185 68

EMD/SM 3457


21st June 1991

GAS FREE CERTIFICATE FOR TWO 5,000 AND ONE 3,000 GALLON DIESEL
TANKS AT EX GPO PREMISES, FINNIESTON STREET, GLASGOW.

Further to our Certificate No.3448 an additional Tank was dug
out.

All Tanks were steamed out above ground on Site and destroyed
whilst in that state, work completed on Monday 17th June,1991.

For TANK CLEANERS (GLASGOW) LTD


E.M.DREW.
Director.

The Chief Petroleum Officer
Consumer Protection Department
Strathclyde Regional Council
St.Enoch House
St.Enoch Square
Glasgow G1 4BH.

Copy to: G.A. Group Ltd
Woodside House
14 Woodside Terrace
Glasgow G3 7XH.

O/Ref. Mr.R.Mcnee.

THIS CERTIFICATE EXCLUDES THE USE OF FLAME/SPARK PRODUCING

Appendix 4

Principals of Environmental Risk Assessment

Principles of Environmental Risk Assessment

The Environmental Protection Act 1990, Part II A Contaminated Land (Section 57 of the Environment Act 1995) and the Contaminated Land (Scotland) Regulations 2005 provide a basis on which to determine the risks and liabilities presented by a contaminated site. Contaminated Land is defined within Annex 3, Chapter A Part 1- Scope of Chapter and in all those Sections mentioned as:

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

- (a) Significant harm is being caused or there is significant possibility of such harm being caused; or
- (b) Significant pollution of the water environment is being caused or there is a significant possibility of such pollution being caused.”

Section 57 of the Environment Act 1995 requires that any site identified as being “contaminated” by the Local Authority will be registered by them and remediation will be required to render the site fit for use.

The presence of contamination is not the sole factor for deciding whether a site is contaminated. Relevant parties should identify site-specific risks and provide objective, cost-effective methods to manage the contamination in a manner which satisfies the proposed end-use.

A risk-based approach, which takes both technical and non-technical aspects into consideration when making decisions on contamination resulting from past, present or future human activities, is advocated. The assessment of environmental risks generally relies on the identification of three principal elements forming a ‘pollutant linkage’:

- Source: the contaminant
- Pathway: the route through which the contaminant can migrate, and
- Receptor: any human, animal, plant, water environment or property that may be adversely affected (harmed) by the contaminant

In the absence of any one of these elements, on any given site, there is no risk. Where all three elements are present, risk assessment is required to determine the significance of the harm or pollution that is being or may be caused. As outlined above, the terms of the Contaminated Land regime specify that remediation need only be implemented where a site is causing, or there is a significant possibility that it will cause, significant harm, or that significant pollution of the water environment is being, or there is a significant possibility of such pollution being caused.

Development of contaminated land is usually addressed through the application of planning and development legislation and guidance (i.e. Planning Guidance Note PPG23 in England and Advice Note 33 in Scotland). The suitable for use approach is seen as the most appropriate basis to deal with contaminated land, taking account of environmental, social and economic objectives. The assessment is made in the context of the proposed land use (e.g. residential, commercial, industrial and public open-space).

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