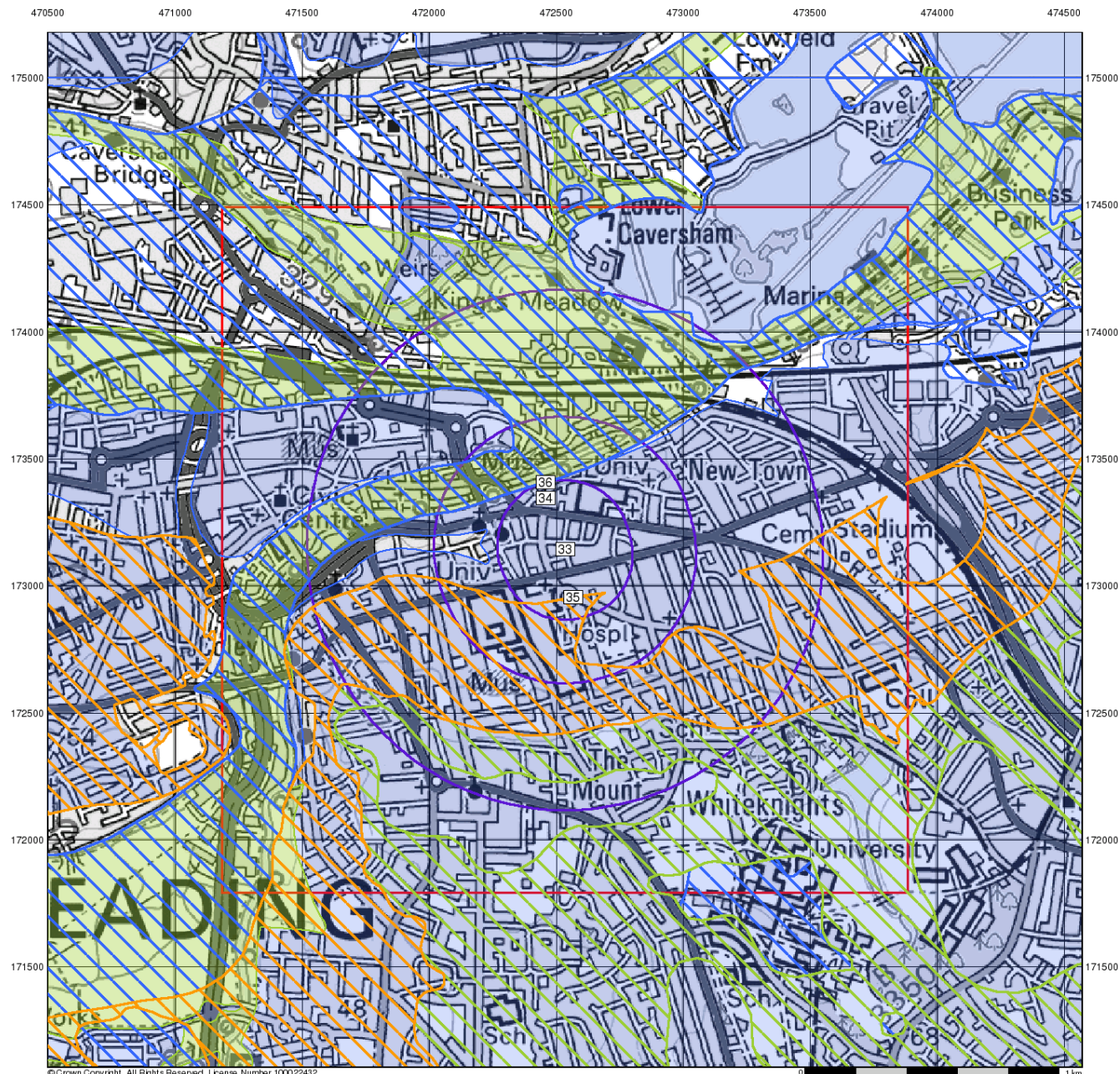




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Terramech Investigations Ltd

Ground Stability Data (1:50,000)

General

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

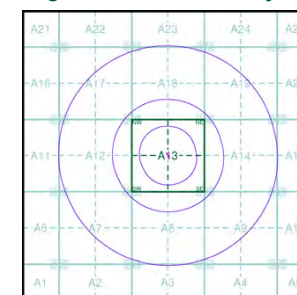
Potential for Running Sand Ground Stability Hazards

- High
- Low
- Moderate
- Very Low

Potential for Shrinking or Swelling Clay Ground Stability Hazards

- High
- Low
- Moderate
- Very Low

Mining and Ground Stability - Slice A



Order Details

Order Number: 216655226_1_1
 Customer Ref: 4178
 National Grid Reference: 472530, 173140
 Slice: A
 Site Area (Ha): 0.09
 Search Buffer (m): 1000

Site Details

Printmaker, Printmaker, 14-16, Eldon Terrace, Reading, RG1 4DX

Landmark
 INFORMATION GROUP

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

Envirocheck[®] Report:

Mining and Ground Stability Datasheet

Order Details:

Order Number:

216655226_1_1

Customer Reference:

4178

National Grid Reference:

472530, 173140

Slice:

A

Site Area (Ha):

0.09

Search Buffer (m):

1000

Site Details:

Printmaker, Printmaker

14-16

Eldon Terrace

Reading

RG1 4DX

Client Details:

Mr J Puzyna

Terramech Investigations Ltd

183 Long Lane

Tilehurst

Reading

Berkshire

RG31 6YW

Report Section and Details	Page Number
Summary	-
The Summary section provides an overview of the data contained within the report, detailing the number of data set features or the existence of a data set in relation to the buffer selected. For ease of reference, the report is broken down into 4 sections of data; Mining and Natural Cavities Data, Historical Land Use Information (1:2,500), Historical Land Use Information (1:10,000) and Ground Stability Data (1:50,000).	
Mining and Natural Cavities Data	1
The Mining and Natural Cavities Data section features data sets related to the existence of mining areas and their potential hazards; and details of naturally formed cavities. Data sets within this section are not plotted, with the exception of BGS Recorded Mineral Sites and Potential Mining Areas which feature on the Historical Land Use Information (1:10,000) map.	
Historical Land Use Information (1:2,500)	-
The Historical Land Use Information (1:2,500) section contains data captured from analysis carried out by Landmark of 1:1,250 and 1:2,500 scale historical Ordnance Survey mapping, identifying areas where, historically, the land uses were potentially contaminative. For the purpose of this Envirocheck module, only historical data relating to mining and ground stability has been included and plotted on the corresponding Historical Land Use Information (1:2,500) map. This section also includes the Subterranean Features data set, which details various man-made and man-used underground spaces obtained from the Subterranea Britannica society.	
Historical Land Use Information (1:10,000)	4
The Historical Land Use (1:10,000) section covers data captured from the systematic analysis carried out by Landmark of 1:10, 560 and 1:10,000 scale historical Ordnance Survey mapping dating back to the mid-19th century, identifying potentially contaminative past industrial land uses. For the purpose of this Envirocheck module, only data relating to mining and ground stability has been included and plotted on the accompanying Historical Land Use Information (1:10,000) map.	
Ground Stability Data (1:50,000)	5
The Ground Stability (1:50,000) section includes the BGS Geosure data suite, reporting features to 250m and plotted onto 3 separate maps. Also reported is brine subsidence, brine mining and salt mining data sets, of which Brine Pumping and Salt Mining Related Features are plotted, and subsidence insurance claims and insurance investigations data, which is not plotted.	
Historical Map List	6
The Historical Map List section details the historical mapping that has been analysed for your site, in relation to the Historical Land Use Information sections.	
Data Currency	7
Data Suppliers	8
Useful Contacts	9

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

The Mining Instability data was obtained on licence from Ove Arup & Partners Limited (for further information, contact mining.review@arup.com). No reproduction or further use of such Data is to be made without the prior written consent of Ove Arup & Partners Limited. The supplied Mining Instability data is derived from publicly available records and other third party sources and neither Ove Arup & Partners nor Landmark warrant the accuracy or completeness of such information or data.

Report Version v53.0



Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m
Mining and Natural Cavities Data					
BGS Recorded Mineral Sites	pg 1				7
Coal Mining Affected Areas			n/a	n/a	n/a
Man Made Mining Cavities	pg 2			1	7
Mining Instability			n/a	n/a	n/a
Natural Cavities	pg 2			1	4
Non Coal Mining Areas of Great Britain	pg 3	Yes	Yes	n/a	n/a
Potential Mining Areas					
Historical Land Use Information (1:2,500)					
Extractive Industries or Potential Excavations from 1855-1909 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1893-1915 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1906-1937 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1924-1949 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1950-1980 (100m)				n/a	n/a
Subterranean Features (100m)				n/a	n/a
Historical Land Use Information (1:10,000)					
Air Shafts					
Disturbed Ground					
General Quarrying					
Heap, unknown constituents	pg 4				2
Mineral Railway					
Mining & quarrying general					
Mining of coal & lignite					
Quarrying of sand & clay, operation of sand & gravel pits	pg 4				6
Former Marshes					
Potentially Infilled Land (Non-Water)	pg 4				6
Potentially Infilled Land (Water)	pg 4				4



Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m
Ground Stability Data (1:50,000)					
CBSCB Compensation District			n/a	n/a	n/a
Brine Pumping Related Features					
Brine Subsidence Solution Area					
Potential for Collapsible Ground Stability Hazards	pg 5	Yes	Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 5	Yes	Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards	pg 5	Yes	Yes	n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 5	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 5	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 5	Yes	Yes	n/a	n/a
Salt Mining Related Features					
Subsidence Insurance Claims				n/a	n/a
Subsidence Investigations	pg 5		1	n/a	n/a

Report Version v53.0



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	BGS Recorded Mineral Sites Site Name: Reading School Gravel Pit Location: Reading, Berkshire Source: British Geological Survey, National Geoscience Information Service Reference: 234945 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Wolstonian Geology: Taplow Gravel Formation Commodity: Gravel Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	673	1	473115 172757
2	BGS Recorded Mineral Sites Site Name: Reading School Gravel Pit Location: Reading, Berkshire Source: British Geological Survey, National Geoscience Information Service Reference: 234944 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Wolstonian Geology: Taplow Gravel Formation Commodity: Gravel Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	742	1	473188 172744
3	BGS Recorded Mineral Sites Site Name: Cholmelly Road Gravel Pit Location: New Town, Reading, Berkshire Source: British Geological Survey, National Geoscience Information Service Reference: 234950 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Quaternary, Devensian Geology: Kempton Park Gravel Formation Commodity: Gravel Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	794	1	473159 173660
4	BGS Recorded Mineral Sites Site Name: Wokingham Road Gravel Pit Location: New Town, Reading, Berkshire Source: British Geological Survey, National Geoscience Information Service Reference: 234946 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Wolstonian Geology: Taplow Gravel Formation Commodity: Gravel Positional Accuracy: Located by supplier to within 10m	A14SE (E)	835	1	473382 173059
5	BGS Recorded Mineral Sites Site Name: New Town Gravel Pit Location: New Town, Reading, Berkshire Source: British Geological Survey, National Geoscience Information Service Reference: 36349 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Quaternary Geology: Kempton Park Gravel Formation Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	912	1	473320 173634
6	BGS Recorded Mineral Sites Site Name: Wokingham Road Gravel Pit Location: New Town, Reading, Berkshire Source: British Geological Survey, National Geoscience Information Service Reference: 234947 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Wolstonian Geology: Taplow Gravel Formation Commodity: Gravel Positional Accuracy: Located by supplier to within 10m	A14SE (E)	963	1	473507 173019



Mining and Natural Cavities Data

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	BGS Recorded Mineral Sites Site Name: Ivy Bridge Brick Field Location: The Mount, Reading, Berkshire Source: British Geological Survey, National Geoscience Information Service Reference: 36342 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Quaternary Geology: Head (Brickearth) Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	979	1	471778 172498
	Coal Mining Affected Areas In an area which may not be affected by coal mining				
	Man Made Mining Cavities Cavity Type: Historical Chalk/Lime Quarry-Potential Chalk Mining Commodity: Chalk Solid Geology Detail: Chalk Group Superficial Geology: Taplow Gravel Detail:	A13SW (W)	323	2	472200 173100
	Man Made Mining Cavities Cavity Type: Brick/Tile Kiln Discovered-Potential Chalk Mining Commodity: Chalk Solid Geology Detail: Chalk Group Superficial Geology: Taplow Gravel Detail:	A12SE (SW)	626	2	471950 172890
	Man Made Mining Cavities Cavity Type: Historical Brick Kiln-Potential Chalk Mining Commodity: Chalk Solid Geology Detail: Lambeth Group, Upper Chalk Formation Superficial Geology: No Details Detail:	A7NE (SW)	761	2	471900 172700
	Man Made Mining Cavities Cavity Type: Crown Hole Collapse Commodity: Chalk Solid Geology Detail: Lambeth Group, Upper Chalk Formation Superficial Geology: No Details Detail:	A7NW (SW)	831	2	471790 172750
	Man Made Mining Cavities Cavity Type: Subsidence-Over Possible Excavation/Shallow Bell Pit Commodity: Chalk Solid Geology Detail: Lambeth Group, Upper Chalk Formation Superficial Geology: Taplow Gravel Detail:	A12SW (W)	857	2	471700 172900
	Man Made Mining Cavities Cavity Type: Historical Brick Kiln-References to Chalk Mining Commodity: Chalk Solid Geology Detail: London Clay, Lambeth Group, Upper Chalk Formation Superficial Geology: No Details Detail:	A7NW (SW)	923	2	471850 172500
	Man Made Mining Cavities Cavity Type: Chalkwell/Possible Shaft Entry Pillar and Stall Chalk Mine Commodity: Chalk Solid Geology Detail: Lambeth Group, Upper Chalk Formation Superficial Geology: No Details Detail:	A7NW (SW)	934	2	471700 172700
	Man Made Mining Cavities Cavity Type: Historical Brick Works/Extensive Clay Excavations-Potential Chalk Mining Commodity: Chalk Solid Geology Detail: Lambeth Group, Upper Chalk Formation Superficial Geology: No Details Detail:	A7NW (SW)	958	2	471700 172650
	Natural Cavities Cavity Type: Solution Pipe x 3 Solid Geology Detail: Chalk Group Superficial Geology: Taplow Gravel Detail:	A14NW (E)	359	2	472900 173200



Mining and Natural Cavities Data

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Natural Cavities Cavity Type: Sinkhole x 1 Solid Geology Detail: Chalk Group, Lambeth Group Superficial Geology Taplow Gravel Detail:	A14SW (E)	564	2	473100 173000
	Natural Cavities Cavity Type: Sinkhole x 1 Solid Geology Detail: Chalk Group Superficial Geology Taplow Gravel Detail:	A14SE (E)	850	2	473400 173100
	Natural Cavities Cavity Type: Unknown Solid Geology Detail: Chalk Group, Lambeth Group Superficial Geology No Details Detail:	A7NW (W)	984	2	471600 172800
	Natural Cavities Cavity Type: Solution Pipe x 5 Solid Geology Detail: Chalk Group Superficial Geology Taplow Gravel Detail:	A12NW (W)	997	2	471550 173400
	Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	472534 173143
	Non Coal Mining Areas of Great Britain Risk: Unlikely Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	166	1	472566 172955



Historical Land Use Information (1:10,000)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	Heap, unknown constituents Use: Not Supplied Date of Mapping: 1962	A18NW (N)	696	-	472522 173862
9	Heap, unknown constituents Use: Not Supplied Date of Mapping: 1962	A18NE (N)	732	-	472698 173879
10	Quarrying of sand & clay, operation of sand & gravel pits Use: Not Supplied Date of Mapping: 1883	A9NW (SE)	753	-	473197 172738
11	Quarrying of sand & clay, operation of sand & gravel pits Use: Not Supplied Date of Mapping: 1883	A19SW (NE)	794	-	473160 173659
12	Quarrying of sand & clay, operation of sand & gravel pits Use: Not Supplied Date of Mapping: 1883	A14SE (E)	836	-	473384 173063
13	Quarrying of sand & clay, operation of sand & gravel pits Use: Not Supplied Date of Mapping: 1900	A19SE (NE)	926	-	473331 173642
14	Quarrying of sand & clay, operation of sand & gravel pits Use: Not Supplied Date of Mapping: 1883	A14SE (E)	965	-	473510 173020
15	Quarrying of sand & clay, operation of sand & gravel pits Use: Not Supplied Date of Mapping: 1991	A18NE (N)	971	-	472843 174088
16	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1995	A9NW (SE)	753	-	473197 172738
17	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1995	A19SW (NE)	797	-	473163 173660
18	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1995	A14SE (E)	838	-	473385 173060
19	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1995	A7NE (SW)	885	-	471869 172536
20	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1995	A19SE (NE)	925	-	473331 173641
21	Potentially Infilled Land (Non-Water) Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1995	A14SE (E)	966	-	473510 173020
22	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1900	A12NW (W)	827	-	471691 173164
23	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1900	A12SW (W)	855	-	471663 173137
24	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1962	A12SW (W)	910	-	471609 173116
25	Potentially Infilled Land (Water) Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1900	A7SE (SW)	991	-	471935 172329



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	CBSCB Compensation District The site does not fall within the brine compensation area.				
	Brine Subsidence Solution Area The site does not fall within the brine subsidence solution area.				
26	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	472534 173143
	Potential for Collapsible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	250	1	472458 173409
27	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	250	1	472458 173409
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	472534 173143
28	Potential for Ground Dissolution Stability Hazards Hazard Potential: High Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	472534 173143
29	Potential for Ground Dissolution Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (N)	74	1	472542 173239
30	Potential for Ground Dissolution Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	97	1	472606 173234
31	Potential for Ground Dissolution Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	166	1	472566 172955
32	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	472534 173143
33	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	472534 173143
34	Potential for Running Sand Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	250	1	472458 173409
35	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	166	1	472566 172955
36	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	250	1	472458 173409
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	472534 173143
	Subsidence Investigations Site Investigation Date: 13th October 2010 Root Survey: Yes CCTV Drain Survey: No Depth of Foundation: Not Supplied Footings: Not Supplied Soil Classification: Not Supplied			-	

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

1:2,500	Mapsheet	Published Date
Berkshire	037_03	1879
Berkshire	037_03	1899
Berkshire	037_03	1912
Berkshire	037_03	1931

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

1:10,560	Mapsheet	Published Date
Oxfordshire	056_00	1882
Berkshire	037_00	1883
Berkshire	029_SE	1900
Berkshire	037_NE	1900
Oxfordshire	056_SE	1900
Oxfordshire	058_NE	1900
Berkshire	037_NE	1913
Oxfordshire	058_NE	1913
Berkshire	029_SE	1914
Oxfordshire	056_SE	1914
Berkshire	037_NE	1931
Berkshire	029_SE	1932
Ordnance Survey Plan	SU77SW	1962
1:10,000	Mapsheet	Published Date
Ordnance Survey Plan	SU77SW	1995



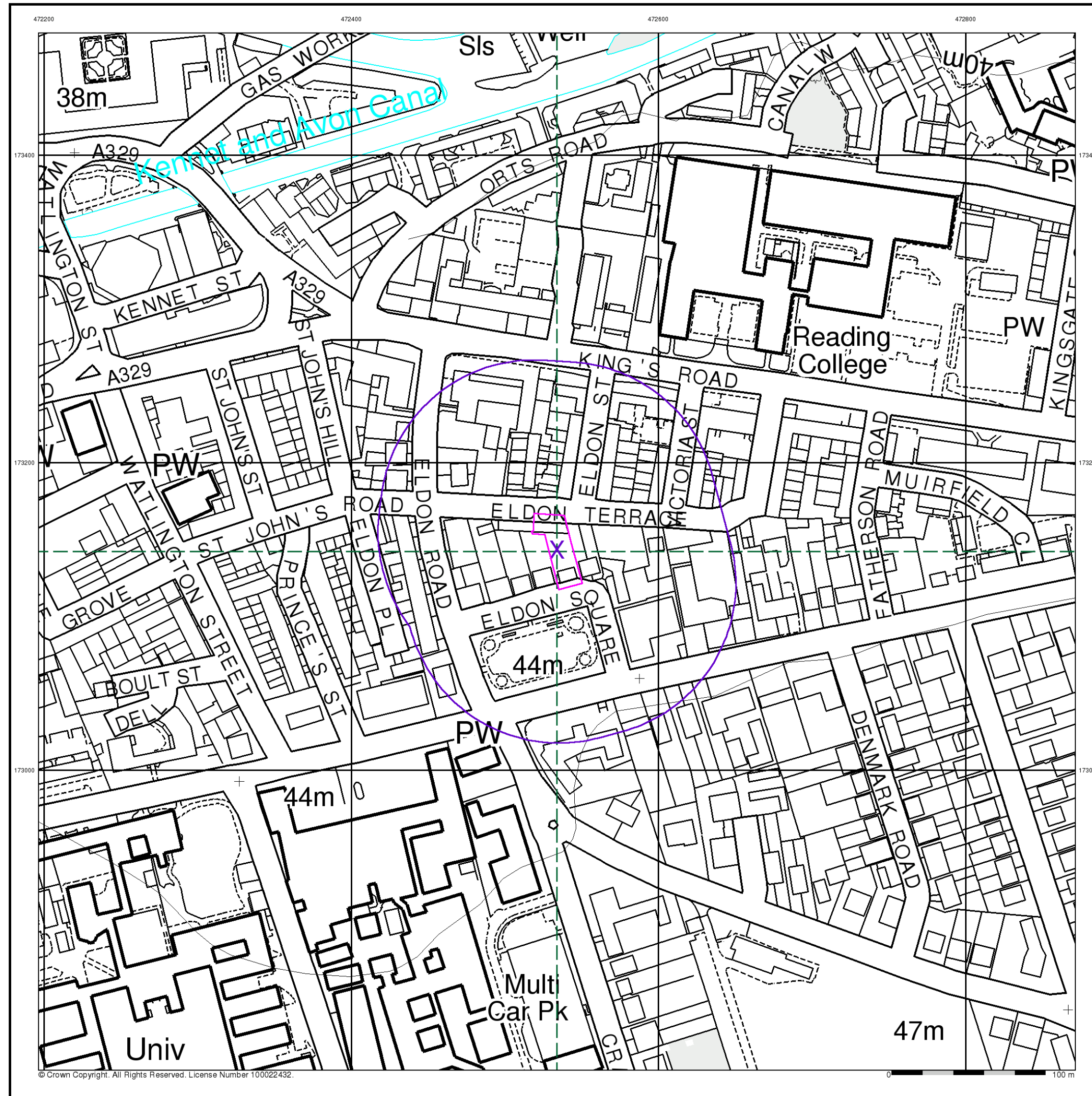
Mining and Cavities Data	Version	Update Cycle
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	April 2019	Bi-Annually
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Man Made Mining Cavities Peter Brett Associates	July 2019	Bi-Annually
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Natural Cavities Peter Brett Associates	July 2019	Bi-Annually
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Historical Land Use Information (1:2,500)	Version	Update Cycle
Subterranean Features Landmark Information Group Limited	March 2019	Bi-Annually
Ground Stability Data (1:50,000)	Version	Update Cycle
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Subsidence Insurance Claims SP Property Services	October 2018	Quarterly
Subsidence Investigations CET Structures Ltd	July 2018	Quarterly
Brine Subsidence Solution Area Johnson Poole & Bloomer	January 2015	Annual Rolling Update

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
British Geological Survey	
The Coal Authority	
Ove Arup	
Peter Brett Associates	
Wardell Armstrong	
Johnson Poole & Bloomer	



Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Peter Brett Associates Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN	Telephone: 0118 950 0761 Fax: 0118 959 7498 Email: reading@pba.co.uk Website: www.pba.co.uk
3	Ove Arup & Partners Central Square, Forth Street, Newcastle upon Tyne, Tyne and Wear, NE1 3PL	Telephone: 0191 261 6080 Fax: 0191 261 7879
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk



Historical Land Use Information (1:2,500)

General

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

Several of Type at Location

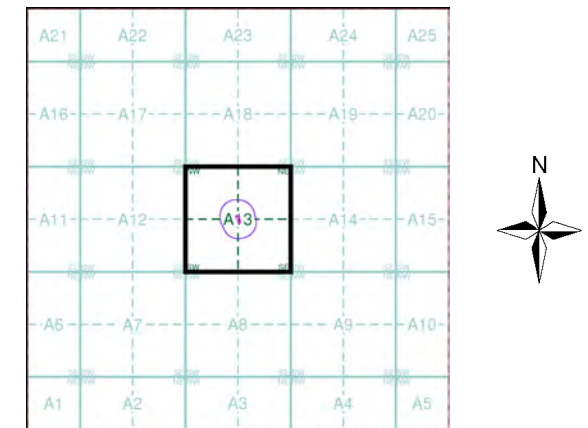
Potentially Contaminative Industrial Uses (Extractive Industries Activity)

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

Subterranean Features

	Point	Line	Polygon
Subterranean Features	▼	---	■

Mining and Ground Stability - Segment A13



Order Details

Order Number: 216655226_1_1
Customer Ref: 4178
National Grid Reference: 472530, 173140
Slice: A
Site Area (Ha): 0.09
Plot Buffer (m): 100

Site Details

Printmaker, Printmaker, 14-16, Eldon Terrace, Reading, RG1 4DX

**PHASE 1 ENVIRONMENTAL INVESTIGATION
NO 4178/19
GARAGES AT 14-16, ELDON TERRACE,
READING, BERKSHIRE
FOR
PROPOSED HOUSING DEVELOPMENT**

APPENDIX G

DISCOVERY STATEMENT



1879



2018

Site History

Records show that this house and its gardens have changed little since it was constructed in 1840. The only changes have been to the layout of the former stables on the northern half of the site. Various small changes can be seen on historic maps between 1879 and 2018.

Study of the maps and the geology of the area has shown that the site was never part of industrial Reading and that there were no plausible links between the site and areas of current and historic industry in Reading.

Small businesses have operated from the garages, these include a printing firm and a taxi firm that used the garages for service and repair of its vehicles. Although we are not expecting to see any significant contamination below the site, groundworkers and other construction workers should be aware of potential contamination issues that could be present.

Page 2	JOB NO 4178 GARAGES AT 14-16 ELDON TERRACE, READING, BERKSHIRE	DISCOVERY STATEMENT
DATE: 27.09.18		

Risks Posed by Contaminated Soils

Any potentially contaminated soil will be a problem with regard to the new occupants of the site as well as, waste soil disposal, foundation design, exposure of the construction workforce and protection of our drinking water supplies.

We would not expect that the soil below the site to be contaminated however It is very important that any discoveries of contaminated soils are notified as quickly as possible.

Potential Contaminants

Following our preliminary investigations, we have concluded that the following groups of contaminants could be present below the surface at this site.

1) Asbestos



These former stables may have been repaired or roofed completely with corrugated asbestos cement boards. There is some potential for any hardcore or rubble used at this site historically to have included fragments of asbestos cement roof board.

If the fragments are intact and un weathered, the risks are negligible however, it would be prudent to ensure that there are no residues in garden areas.

Any fragments found over the proposed new building foot print should be hand picked before the ground is covered by the new building. Any errant fibres left behind below the building would not pose any risk to human health.

If very weathered friable fragments of roof board are found, or in the very unlikely even that other asbestos products are discovered, work in that area should be halted and the discovery notified.

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2) Fuel

As discussed, fuel and lubricants may have entered the ground during the use of the site as a repair garage. Most site workers should be aware of the types of odour associated with petrol, diesel and old engine oil.



Sometimes, where the hydrocarbons have become absorbed by naturally orange brown coloured soils (due to natural Iron compounds), the soils can become stained a blue/grey colour as shown in the picture above where diesel had leaked into the ground.

Old engine oil will stain soils black, sometimes the oil can become emulsified and appear as a pale coffee coloured paste.

Such soils pose a limited risk to human health however, they do however, present an odour nuisance if left in place below a new building.

Again, on discovery of soils contaminated by hydrocarbons (Fuel, Lubrication Oil, Gear Oil), work should be stopped in that area and the discovery notified. If strong vapour releases take place, materials should be prepared for covering the soil (sheets or a layer of clean soil).

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3) Printing Inks and Solvents



The site may also have been used historically by a printing firm. There is potential for inks and pigments to have entered the ground on or around the garage. The picture above shows residues from a printing works in Reading where metal based pigments had encrusted an old drainage pipe.

Most small print shops have limited potential to contaminate the ground however, if any signs of odorous solvents or discoloured soils are found work should stop in that area and the discovery notified.

Notification

On discovery of contamination, the work in progress should be stopped by the machine operator or banksman carrying out that work. In the first instance they should notify the site manager who, after inspecting the discovery, will decide whether or not to cover soils with sheeting, a blinding of lean concrete or loose soil.

The site manager will then need to notify Terramech to attend site and inspect, test or sample the contamination that has been discovered. Remedial measures will then be recommended (if necessary) and documented by Terramech.

Significant contamination issues may require all work on site to be halted and for remedial work to be carried out. Remedial works will need to be validated and then approved by the Local Authority Contaminated Land Officer before construction work resumes.

Contact Details

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