

# **Geology 1:50,000 Maps Legends**

# **Artificial Ground and Landslip**

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WGR	Worked Ground (Undivided)	Void	Not Supplied - Holocene

# **Superficial Geology**

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	DHGR	Dollis Hill Gravel Member	Sand and Gravel	Not Supplied - Cromerian
	STGR	Stanmore Gravel Formation	Sand and Gravel	Not Supplied - Pleistocene

# **Bedrock and Faults**

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LC	London Clay Formation	Clay, Silt and Sand	Not Supplied - Ypresian
	CLGB	Claygate Member	Clay, Silt and Sand	Not Supplied - Ypresian
	BGS	Bagshot Formation	Sand	Not Supplied - Ypresian



# Geology 1:50,000 Maps

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

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

# Geology 1:50,000 Maps Coverage

 Map ID:
 1

 Map Sheet No:
 256

 Map Name:
 North London

 Map Date:
 200

 Bedrock Geology:
 Available

 Superficial Geology:
 Available

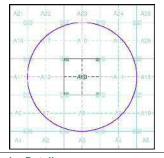
 Artificial Geology:
 Available

 Faults:
 Not Supplied

 Landsilp:
 Available

 Rock Segments:
 Not Supplied

# Geology 1:50,000 Maps - Slice A





## **Order Details:**

 Order Number:
 336047728 1\_1

 Customer Reference:
 21334SAN

 National Grid Reference:
 525730, 185350

 Slice:
 A

 Site Area (Ha):
 0.04

 Search Buffer (m):
 1000

#### Site Details:

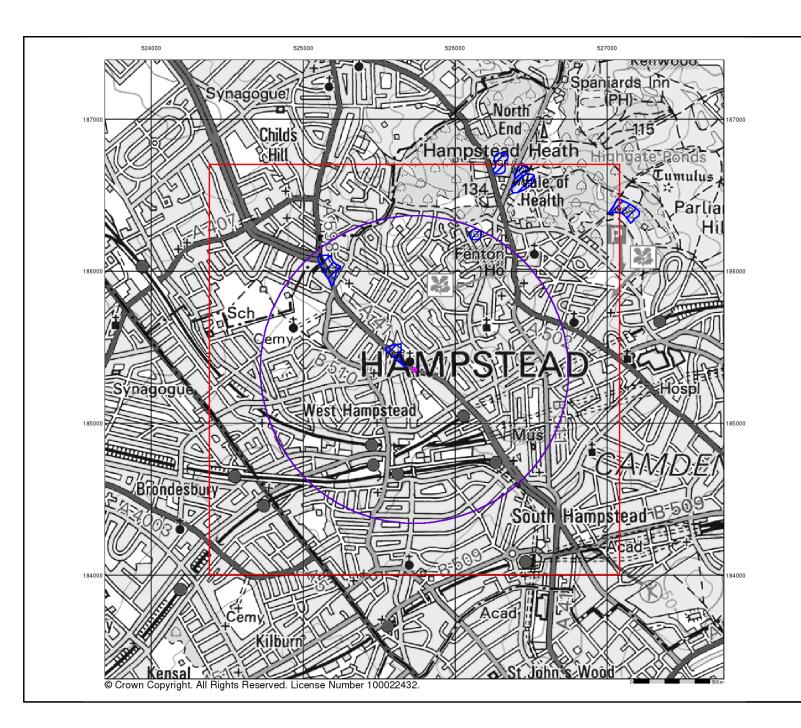
Flat 1, Ashley Court, Frognal Lane, LONDON, NW3 7DX



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

v15.0 20-Feb-2024

Page 1 of 5





#### **Artificial Ground and Landslip**

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

Artificial ground includes:

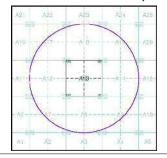
- Made ground man-made deposits such as embankments and spoil
- heaps on the natural ground surface.

   Worked ground areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground areas where the ground has been cut away then wholly or partially backfilled.
- Disturbed ground areas where the surface has been reshaped.

   Disturbed ground areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground

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

# Artificial Ground and Landslip Map - Slice A





# **Order Details:**

336047728\_1\_1 21334SAN 525730, 185350 Order Number: Customer Reference: National Grid Reference: A 0.04

Site Area (Ha): Search Buffer (m): 1000

## Site Details:

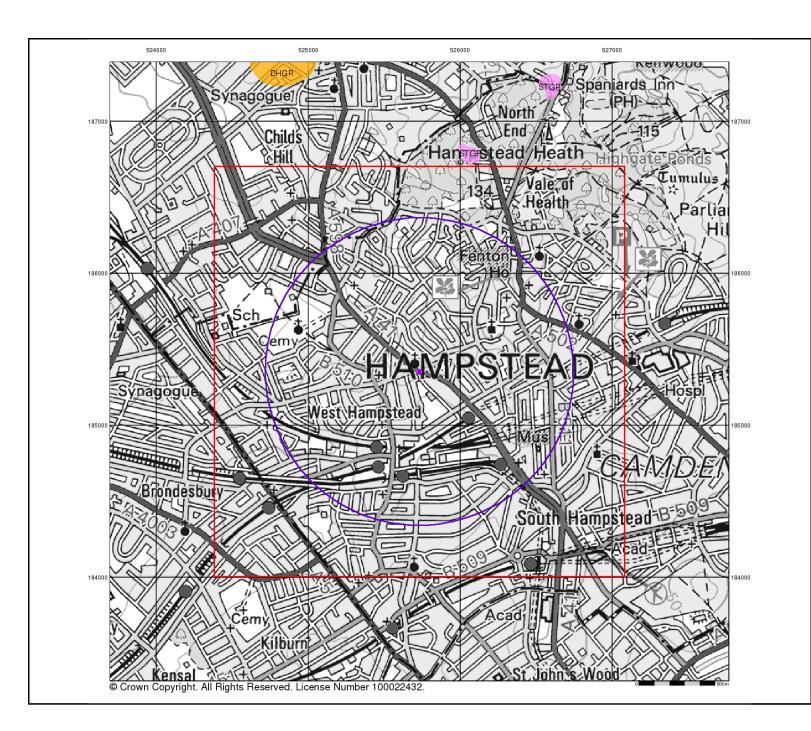
Flat 1, Ashley Court, Frognal Lane, LONDON, NW3 7DX



0844 844 9952 0844 844 9951

v15.0 20-Feb-2024

Page 2 of 5





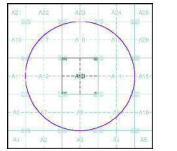
#### **Superficial Geology**

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

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

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

# Superficial Geology Map - Slice A





# **Order Details:**

336047728\_1\_1 21334SAN 525730, 185350 Order Number: Customer Reference: National Grid Reference: A 0.04 Site Area (Ha): Search Buffer (m): 1000

## Site Details:

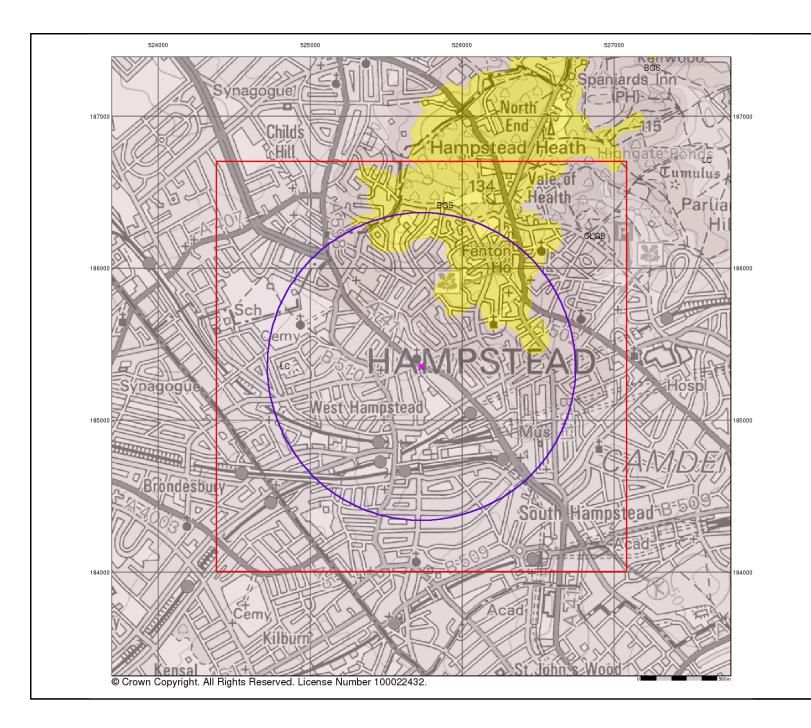
Flat 1, Ashley Court, Frognal Lane, LONDON, NW3 7DX



0844 844 9952 0844 844 9951

v15.0 20-Feb-2024

Page 3 of 5





#### **Bedrock and Faults**

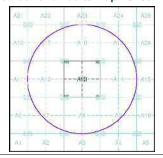
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

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

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

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

# Bedrock and Faults Map - Slice A





# Order Details:

Order Number: 336047728\_1\_1
Customer Reference: 213345AN
National Grid Reference: 525730, 185350
Slice: A
Site Area (Ha): 0.04
Search Buffer (m): 1000

## Site Details:

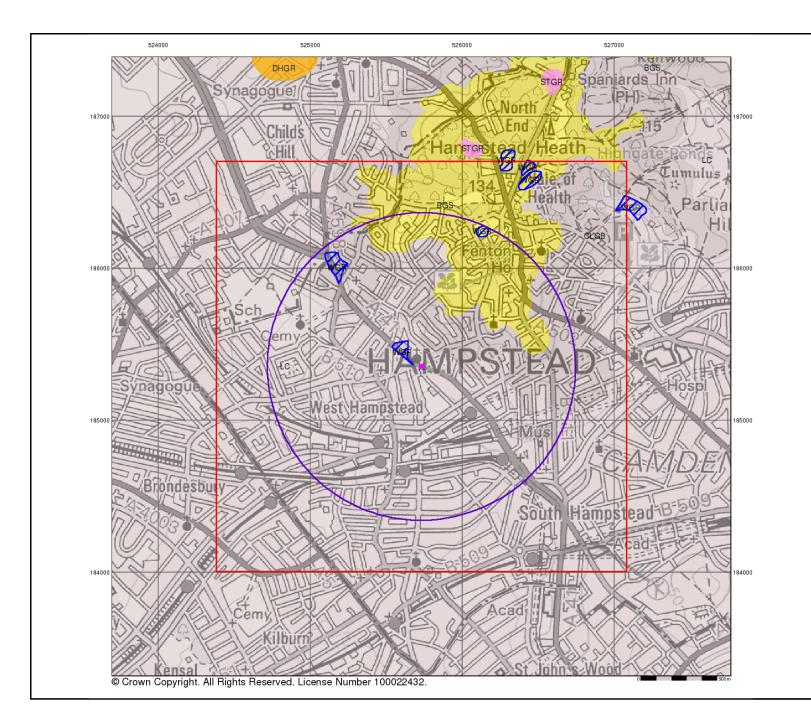
Flat 1, Ashley Court, Frognal Lane, LONDON, NW3 7DX



Tel: 0844 844 9952 Fax: 0844 844 9951 Veb: www.envirocheck.c

v15.0 20-Feb-2024

Page 4 of 5





### **Combined Surface Geology**

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

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

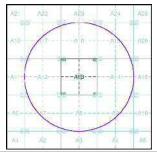
#### **Additional Information**

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

#### Contact

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

# Combined Geology Map - Slice A





# Order Details:

Order Number: 336047728\_1\_1
Customer Reference: 213345AN
National Grid Reference: 525730, 185350
Slice: A
Site Area (Ha): 0.04
Search Buffer (m): 1000

arch Buffer (m):

## Site Details:

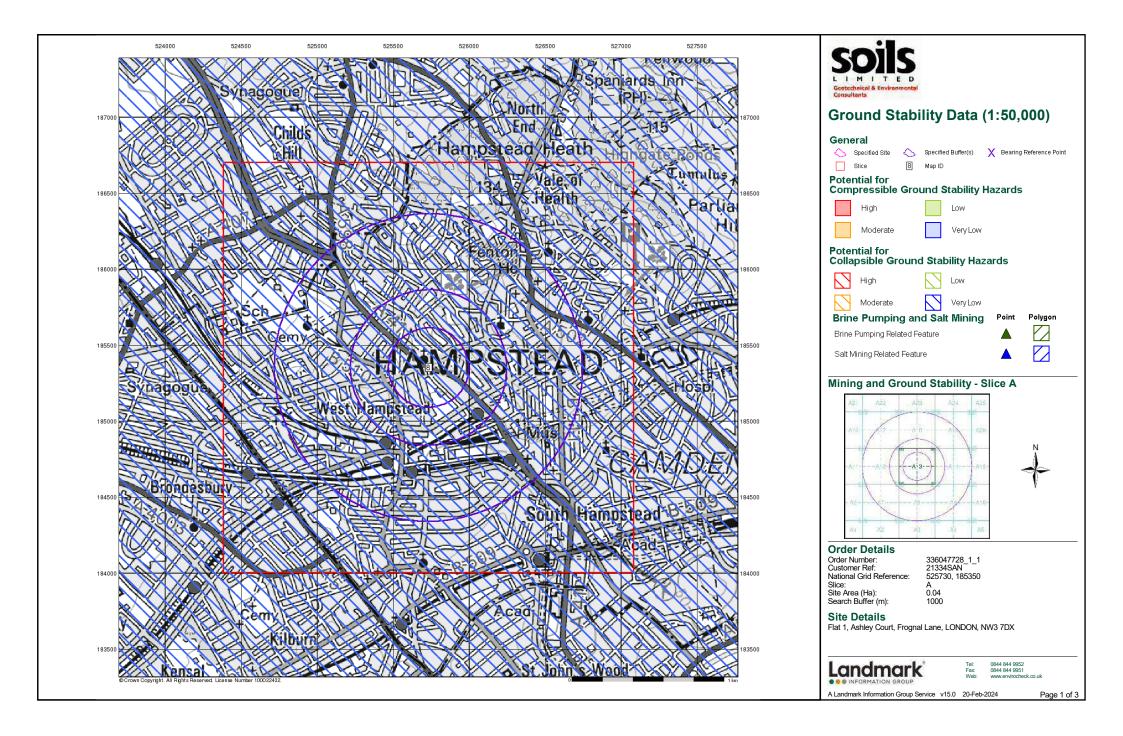
Flat 1, Ashley Court, Frognal Lane, LONDON, NW3 7DX

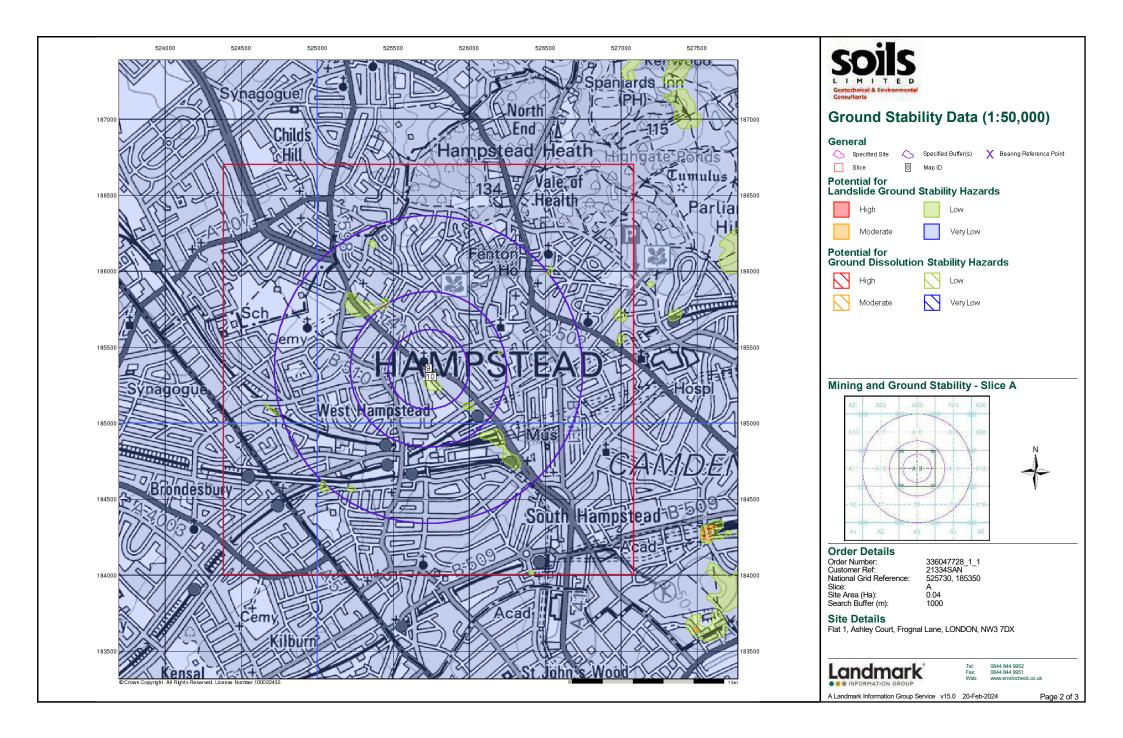


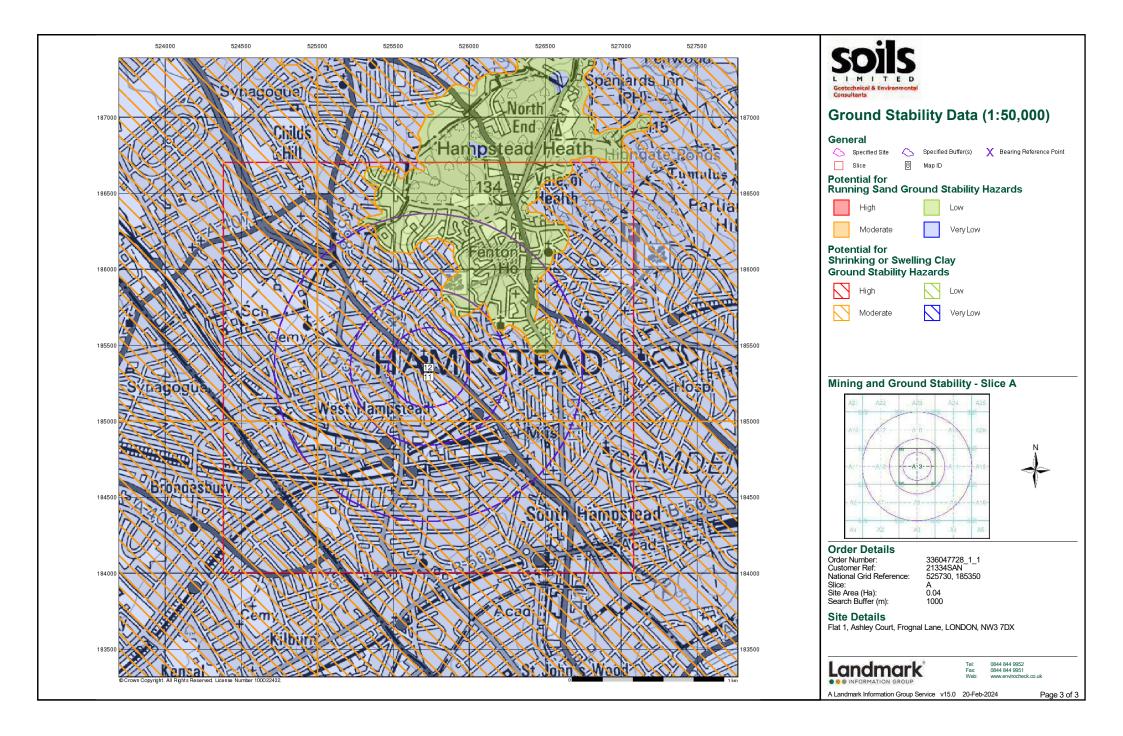
Tel: 0844 844 9952 Fax: 0844 844 9951 Veb: www.envirocheck.c

v15.0 20-Feb-2024

Page 5 of 5







# Soils Limited 21334/PIR Rev 1.0 Frognal Garages, London Preliminary Investigation Report

Appendix E Local Authority Search Data

# Appendix F Site Photographs



Photo I:

N boundary of site, photo facing S. Preexisting garages and hardstanding parking spaces at the front of the proposed development.



Photo 2:

S boundary of site, photo facing E. green area and paving slabs to the back of the proposed development.



Photo 3:

 ${\sf E}$  boundary of site, photo facing S. Eastern boundary up against residential properties to the  ${\sf W}.$ 



Photo 4:

W boundary of site, photo facing N. Small alley way leading from the front of the garages to the rear. Small paved area with some vegetation.



Photo 5: Internal photo of one of the garages.



**Photo 6:** Photo of one of the garages being used for storage.

# Appendix G Risk Assessment Criteria

The classification presented in Table G.1 to Table G.4 below are modified from, 'contaminated land risk assessment: A guide to good practice, 2001, CIRIA C552'.

Table G.I. Classification of Consequence

Classification	Definition
Severe	Short-term (acute) risk to human health likely to result in "significant harm" as defined by the Environmental Protection Act 1990, Part IIA. Short term risk of pollution (note: Water Recourses Act contains no scope for considering significance of pollution) of sensitive water resource. Catastrophic damage to buildings/property. A short-term risk to a particular ecosystem (note: the definitions of ecological systems within the Draft Circular on Contaminated Land, DETR, 2000.)
Medium	Chronic damage to Human Health ("significant harm" as defined in DETR, 2000).  Pollution of sensitive water recourse (note: Water Recourses Act contains no scope for considering significance of pollution). A significant change in a particular ecosystem (note: the definitions of ecological systems within the Draft Circular on Contaminated Land, DETR, 2000.)
Mild	Pollution of non-sensitive water recourses. Significant damage to crops, buildings, structures and services ("significant harm" as defined in the Draft Circular on Contaminated Land, DETR, 2000.)
Minor	Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc.)

Table G.2. Classification of Probability

Classification	Definition
High likelihood	There is a pollution linkage and an event that either appears very likely in the short term and almost inevitable over the long term or there is evidence at the receptors of harm or pollution.
Likely	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable but possible in the short term and likely over the long term.
Low likelihood	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such event would take place and is less likely in the short term.
Unlikely	There is a pollution linkage, but circumstances are such that it is improbable that an event would occur even in the long term.

Table G.3. Comparison of Consequence Against Probability

<b>Probability</b>	Consequence				
	Severe	Medium	Mild	Minor	
High likelihood	Very high risk	High risk	Moderate risk	Moderate/low risk	
Likely	High risk	Moderate risk	Moderate/low risk	Low risk	
Low likelihood	Moderate risk	Moderate/low risk	Low risk	Very low risk	
Unlikely	Moderate risk	Low risk	Very low risk	Very low risk	

# **Table G.4. Risk Classifications**

Very High	There is a high probability that severe harm could arise to a designated receptor from an identified hazard at the site without remediation action OR there is evidence that severe harm to a designated receptor is already occurring. Realisation of that risk is likely to present a substantial liability to be site owner/or occupier. Investigation is required as a matter of urgency and remediation works likely to follow in the short-term.
High	Harm is likely to arise to a designated receptor from an identified hazard at the site without remediation action. Realisation of the risk is likely to present a substantial liability to the site owner/or occupier. Investigation is required as a matter of urgency to clarify the risk.  Remediation works may be necessary in the short-term and are likely over the longer term.
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, and if any harm were to occur it is more likely, that the harm would be relatively mild. Further investigative work is normally required to clarify the risk and to determine the potential liability to site owner/occupier. Some remediation works may be required in the longer term.
Low	It is possible that harm could arise to a designated receptor from identified hazard, but it is likely at worst, that this harm if realised would normally be mild. It is unlikely that the site owner/or occupier would face substantial liabilities from such a risk. Further investigative work (which is likely to be limited) to clarify the risk may be required. Any subsequent remediation works are likely to be relatively limited.
Very low	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.
None	No potential risk if no pollution linkage has been established.

**Soils Limited Geotechnical & Environmental Consultants** 

Newton House Cross Road, Tadworth Surrey KT20 5SR

T 01737 814221
W soilslimited.co.uk