

Across the UK, property, infrastructure and land are at risk from complex ground hazards such as mining, clay subsidence, coastal erosion and landslides, all of which can have significant and costly consequences.

Every day, decisions worth millions of pounds are being made without knowledge of the potential risks posed by these hazards, putting the investments of individuals, families and businesses at risk.

At Terrafirma, we are passionate about improving the understanding of the ground, and the complex ways it interacts with the built environment. Our geologists, soil scientists and mining engineers clearly communicate complex ground risks through our pioneering reports, expert advice and innovative ground risk models.

Our reports provide property-specific, ground risk assessments from all mining and natural ground stability hazards that may be required to be assessed when conducting property searches. Below we detail each report and what it reports on.

Terrafirma Ground Report

The Ground Report expertly interprets the risk from coal and all other mining, soil-related subsidence and other natural ground hazards, including coastal hazards and recorded ground movement. The report itself present numerous modules which are detailed below.

- **Coal Mining** The Ground Report includes an official CON29M report. Terrafirma also provides an expert assessment and advice relating to non-coal mining hazards within Coal Authority data which will further help and provide support to conveyancers and prospective homeowners. As well as an integrated Mine Entry Interpretive Report where applicable, saving the client approximately £150 and speeding up the property transaction when a coal mine entry is identified within 20 metres of the property.
- All Other Mining This module provides a property-specific assessment of over 55 different non-coal minerals that have been extracted across the UK. These include Cheshire brine, metalliferous (including tin and copper mining in Cornwall), limestone and gypsum and many more. This ensures your client's potential exposure to all mining related risk is thoroughly assessed.
- **Clay-related subsidence** This module provides an assessment of the risk to a property from clay subsidence, supported by our expert interpretation which assesses the influence of nearby trees. Included also is information on how climate change may affect the risk of clay subsidence in future and evidence of potential regional ground movement using satellite data.
- Natural ground perils This module provides an assessment of all other natural groundstability hazards, including landslides, soluble rocks and the presence of recorded natural cavities. These natural ground conditions can have significant impacts on both existing and future developments and therefore and assessment and recommendations are provided, where relevant, for both the existing use of the property and when considering future development.



Coastal hazards – Launched in September 2020, Terrafirma were the first to provide a property-specific risk assessment of Coastal Hazards which provides key information, such as the risk of coastal collapse within 20 – 50 years, information on local Shoreline Management Plans and analysis of historic coastal landslides.

Additional information – We provide additional information on ground hazards such as Oil & Gas activity, historic Mineral Planning permissions and Radon. These will show whether the property is identified within, or within the vicinity of a previously known mineral planning permission area, an onshore oil & gas license area and whether the property is within a 'radon affected area' as defined by the Health Protection Agency. Advice and next steps are provided where relevant, detailing how a potential purchaser can obtain further assurances regarding these hazards.

Expert Interpretation

Throughout all reports, Terrafirma offer an expert interpretation of the data provided, so not only the purchaser but also the conveyancer and lenders are guided on the next steps/actions to take. This is simply and clearly written within our reports to help speed up the process and make it easier for all those involved within the transaction.

Expert Service

At Terrafirma, we pride ourselves in our expert service. The ground hazards that we assess are varied and complex and while we strive to make our reports as clear and user friendly as possible, we understand that there may be questions, clarifications or simply assurances required that a report has checked something. That is why we encourage that anytime a question arises, you phone the experts at Terrafirma. Operating our phone lines and at the end of our email enquiries are our team of trained geologists who are on hand to answer and clarify any questions you may have. Our contact details can be found within the footer of all our reports, and we respond to all email enquiries within 24 hours, typically within only a couple of hours.