

Explosive results

UXO desk-study specialists should raise their standards or get out of the industry, writes Mike Sainsbury, managing director of Zetica

THE new CIRIA guidance, 'Unexploded Ordnance (UXO): A guide for the construction industry (C681)', has been officially available since October 2009. It is hoped that this long-awaited document will bring a consistent and objective approach to assessing the risk from unexploded ordnance, particularly that related to bombs (UXB) from World Wars I and II.

Many UXO specialists have jumped on the bandwagon and stated that their desk studies are being conducted in accordance with the guidance. There is good reason to believe that this is often just hot air. Some stakeholders, such as consultants and developers, are fed up with the seemingly endless stream of desk studies concluding a moderate to high risk. Such studies can blight development sites, and lead stakeholders into extensive and costly risk-mitigation measures during construction. A measure of stakeholder frustration has been the increasing number of third-party desk studies that Zetica has been asked to review in order to provide a more objective and pragmatic assessment of the risk.

We have found that a large number of desk studies conducted in the UK seem to ignore readily available information that is usually critical in providing a more accurate (often reduced) risk ranking for a site. The explanation (or excuse?) for this is generally a cover-all statement about the 'unknown'; ie that the records for bombing may be incomplete and you cannot rely on them.

Well, if that is the case, why bother with a desk study? Its aim is to reduce the number of unknowns.

Many reports can be 'padded out' with pages and pages of information on different types of ordnance (often irrelevant to the site) and details of bombs that have exploded around the world. Presumably, this is an attempt to cover up the lack of site-specific research. It could also be viewed as a further attempt

to heighten the emotive issues of bombs, making it more difficult for a developer to say no to the risk mitigation measures recommended. On first viewing these 'padded out' reports can be quite impressive and quite interesting. However, on a second occasion you have to check the title again to make sure it is a different report from the last one you read as there is so little site-specific information in them.

The responsibility of an UXO specialist commissioned to write a desk study is to define the UXO risk of a site in as much detail as possible within a reasonable timescale and budget. This requires the use of detailed, site-specific information. While it is important to consider the completeness and accuracy of the records consulted, and make allowances within any risk assessment, desk studies that state there are no records of the site being struck by bombs, but nevertheless recommend extensive risk mitigation measures, are usually untenable.

There are many examples where UXO specialists have apparently not considered all the available records. One example is a desk study of an airfield that was bombed during WWII and the specialist concluded that the site (a small part of the airfield) had a high risk from UXO. The developer accepted this conclusion. A review of the desk study indicated that little in the way of site-specific information had been consulted and further inspection indicated that the conclusion of high risk was an overstatement. A few enquiries and a visit to the local archives proved the airfield had indeed been bombed, but only once by a single stray bomber. The bombs fell some distance away from the site. In fact, further research showed the airfield was used for civilian transport, including German nationals (suspected German spies), and Luftwaffe records identified that the area was deliberately not targeted for bombing as a result.

Another example is a desk study for a small site in a UK city that is not renowned for its WWII bombing. A desk study report concluded a moderate to high risk of UXB being present, which was a bit of a surprise to the developer, who requested its review. While the report said the study had been conducted in compliance with the CIRIA guidance, there was little evidence of this in the results. Subsequent enquiries unearthed a plethora of information indicating that bombing for the city had been documented in detail. Further visits to local libraries and archives revealed detailed site-specific records.



The records cross-referenced well, indicating that they could be relied upon for accuracy and relative completeness. The result was a confirmation that no bombs were recorded as falling on the site, indicating that the UXO risk was low.

Unfortunately, the old adage 'you get what you pay for' is very true for UXO desk studies. UXO specialists are responsible for the level of research carried out, but stakeholders also have to accept some responsibility by trying to save a couple of hundred pounds at the study stage without thinking about the implications in terms of the quality of the product they will receive. A poor study can add hundreds of thousands of pounds to a project's construction costs. While quotes for desk studies from various UXO specialists look like they cover the same scope, you have to wonder why there is a difference in price. An extreme example was a commission that assessed the UXO risk for 12 school sites. The developer went with the cheapest quote, which promised all 12 desk studies for £100 per site. It is doubtful that conducting 12 desk studies for £100 each is economic, so how do these firms make a profit?

This article has presented examples of poor research; the inevitable result of which is a poor estimate of the UXO risk (usually higher) due to the lack of information on which to base a more informed conclusion. The cynic might surmise that information is ignored as it could result in a lower risk. It is time for UXO specialists to raise their game. Abide by the spirit as well as the content of the CIRIA guidance or get out of the industry. It is also time for stakeholders to 'smell the roses' – ask for references from recent past clients and query the resources required to deliver a thorough desk study.

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