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Award-winning papers in 2013

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Award-winning papers in 2013

Papers published in *Geotechnical Engineering* are eligible for awards from the Institution of Civil Engineers. Papers from any of the ICE journals can be nominated for several awards. In addition, each journal has awards dedicated to their specific subject area.

On Friday 17 October 2014, ICE president Geoff French presented awards to the following papers published in *Geotechnical Engineering* in 2013. The editorial panel nominated their best papers and an awards committee chaired by Quentin Leiper allocated the awards.

Safety in Construction Prize

The Safety in Construction Prize, awarded to the paper which best describes the measures taken on a project to safeguard the health and safety of the construction team, the user and the public, was awarded to Smith *et al.* (2013).

Abstract

Site investigation works undertaken as part of the Crossrail cross-London railway project over the last 10 years have involved extensive intrusive works into the ground in areas of London which were known to have been heavily bombed during the Second World War. This bombing created a legacy of unexploded ordnance risk to such works. This paper explains how a procedure was developed to enable the risk to the ground investigation works to be assessed and for appropriate and effective measures to be identified where necessary to mitigate this risk. It is shown that the developed procedure is consistent with that now recommended by the Ciria guide on unexploded ordnance, and provides a practical illustration of how an appropriate risk assessment procedure can avoid extensive and unnecessary mitigation works on site, while ensuring that when mitigation measures are undertaken, it is where and when they are truly needed to enable work to progress safely.

Crampton Prize

The Crampton Prize, presented for the best paper on practical geotechnical engineering, was awarded to Winter *et al.* (2013).

ICE President Geoff French with the Safety in Construction Prize winners Sarah Terry, Phil Smith, Simon Cooke and Ursula Lawrence

Lawrence Shackman, Matt Harrison, Forbes Macgregor and Mike Winter, winners of the Crampton Prize, with ICE President Geoff French

Abstract

A series of rainfall-induced debris flow events in August 2004 affected the Scottish road network, and at Glen Ogle 57 people were airlifted to safety. Although there were no major injuries, the social and economic impacts were significant, particularly the severance of access to and from relatively remote communities. A study was commissioned with the overall purpose of ensuring that the hazards posed by debris flows were systematically assessed and ranked, thus allowing actions at specific sites to be prioritised effectively within available budgets. The methodology used to undertake a pan-Scotland, GIS-based assessment of debris flow susceptibility is described, as is the approach taken to interpret the resulting imagery in order to establish those sections of road alignment subject to hazards. The hazard scores assigned using this approach were subsequently modified in the light of the results of site-specific inspections. The ranking of hazards based upon the potential exposure of road users to debris flow hazards and the potential socio-economic impacts is also described, and a map illustrates the locations of the highest hazard-ranking sites. The success of the system is briefly discussed in the context of subsequent events, and the approach to management and mitigation is outlined.

REFERENCES

Smith P, Lawrence U, Terry S and Cooke S (2013) Unexploded ordnance risk assessment on Crossrail project in London – pre-empting best practice. *Proceedings of the Institution of Civil Engineers – Geotechnical Engineering* **166(4)**: 333–342 http://dx.doi.org/10.1680/geng.11.00005.

Winter MG, Harrison M, Macgregor F and Shackman L (2013) Landslide hazard and risk assessment on the Scottish road network. *Proceedings of the Institution of Civil Engineers – Geotechnical Engineering* **166(6)**: 522–539, http://dx.doi.org/10.1680/geng.12.00063.