PRESS RELEASE

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BGS Civils: Mapping the earth you move

The British Geological Survey (BGS) has launched new datasets for informing ground engineering design called ‘BGS Civils’. The package includes a suite of seven engineering properties for soils and rocks nationwide including strength, bulking volumes and corrosivity and has been developed to facilitate desk study screening for ground engineering projects.

Properties of rocks are important in all engineering projects and the new maps provided by BGS Civils will for the first time deliver this information efficiently to those undertaking desk studies. The information will enable planning of focussed specific site-design and will inform engineering geologists and ground engineers at the desk study stage of investigation. This allows for more efficient planning and execution of ground investigations.

Map of excavatability - helping you identify which tool is needed to excavate to 2m below ground surface

The seven engineering properties for soil and rocks included within the BGS Civils dataset are

- **excavatability** and information on suitable zones for excavation and the local factors controlling it;
- **strength** of geological materials (rocks and fine soils);
- **discontinuities** or any break or change in the rock that could lead to a reduced strength;
- **bulking** or the increase in volume when excavated from its in situ location;
- **sulfate and sulfide** potential in rocks that can give rise to aggressive ground conditions;
- **corrosivity** or the potential for the slow destruction of a solid material by a chemical reaction; and
- suitability of excavated geological material to be used as **engineered fill**.

Dr Kate Royse, Director of Environmental Modelling and Product Development, said “Properties of earth materials are important for all engineering projects and the new BGS Civils data product provides a quick way of getting a generic assessment of the likely ground conditions at the pre-tender and desk study stage. This should make tender preparation, planning and execution of ground investigations far more efficient and reduce project overspend. In addition, as Building
Information Modelling (BIM) becomes the norm for all UK government procured projects, BGS Civils can be used in conjunction with BIM applications”.

The BGS Civils engineering property data will be of interest to a wide range of organisations concerned with development including utility companies, local authorities, developers and engineering consultants and contractors.

*Ends*
BGS Civils data is available from BGS Digital Data

BGS Data Resellers should contact Mike Ackroyd: mikr@nerc.ac.uk

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Notes for Editors

The following are available for interview:

- Dr Kate Royse, British Geological Survey
- Mr Russell Lawley, British Geological Survey

For additional information go to:
http://www.bgs.ac.uk/products/groundConditions/civilsBundleHome.html

The British Geological Survey

The British Geological Survey (BGS), a component body of the Natural Environment Research Council (NERC), is the nation's principal supplier of objective, impartial and up-to-date geological expertise and information for decision making for governmental, commercial and individual users. The BGS maintains and develops the nation's understanding of its geology to improve policy making, enhance national wealth and reduce risk. It also collaborates with the national and international scientific community in carrying out research in strategic areas, including energy and natural resources, our vulnerability to environmental change and hazards, and our general knowledge of the Earth system. More about the BGS can be found at www.bgs.ac.uk.

The Natural Environment Research Council

The Natural Environment Research Council (NERC) is the UK's main agency for funding and managing world-class research, training and knowledge exchange in the environmental sciences. It coordinates some of the world's most exciting research projects, tackling major issues such as climate change, food security, environmental influences on human health, the genetic make-up of life on earth, and much more. NERC receives around £300 million a year from the government's science budget, which it uses to fund research and training in universities and its own research centres. www.nerc.ac.uk