cemetery extension Chippenham

It was five years from the Town Council's initial proposal to provide more burial space before work commenced at their London Road site such are the stringent requirements imposed by the Environment Agency with respect to possible groundwater pollution.

It was back in 2005 that Peter Mitchell Associates were appointed to guide the council through this complex process. They completed the original Tier One assessment, liaised with all parties including the Environment Agency, designed the layout and acted as the council's agent in obtaining planning permission. Thereafter TGMS Ltd. were responsible for detailed site investigations, drainage design, tender specification, contract award and supervision. The painstaking work of mapping the site and coming up with a scheme to mitigate water drain-off likely to contaminate adjacent aquifers or water courses, thus satisfying the Environment Agency, is accomplished by clever piece of kit developed by TGMS Ltd. called 'the buggy'.

Richard Earl alongside main contractor's vehicle



Soil scanner – 'the buggy'



Using Electro-Magnetic Inductance it determines variability in soil type and condition that would not be identified from conventional methods i.e. digging. The high sampling frequency – 5 readings per second – ensures highly detailed topographic data. This is then synchronised with Ordnance Survey datum and then imported into industry standard software (AutoCAD Civil 3D 2009, Arcmap GIS 9.3), to produce maps and drawings. The results from the scanner are predominately affected by clay and water content and so the technique provides a rapid means for determining the most appropriate locations around a site for conducting more detailed analyses of the soil, including the removal of samples for subsequent laboratory analysis. Very often the scan can also detect the presence of existing drainage pipes, electricity cables, water mains and building footings. The resultant data is also invaluable for positioning roads, paths and inspection chambers.

Features of the London Road site are sand slits between graves to aid drainage and the incorporation of a fibre into the soil. TGMS managing director, Richard Earl says, 'Loksand is usually used in 1st class football pitches to increase wear resistance of natural turf, however we used it very successfully under grassed paths in Warblington Cemetery (Hampshire) and have therefore adopted it for Chippenham.

Loksand awaiting soil integration



Preparation for concrete raft installation



'Basically I have designed the paths such that they will be freely draining (there is a land drain beneath each path), but will support an excavator and pedestrian traffic whilst blending into the surroundings of mown grass.' The first burials in this hugely impressive £250,000 extension are due to take place at the beginning of next year.

Bob Coates