

## **Outdoor Multi Purposes Geophysical Test Site for Educational and Research Activities**

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### **Abstract**

Constructing a controlled test site is one of the most important tasks for educational and research purposes. In the test site, simulation of the real field objects are essential to enhance the geophysical educational tasks and enrich the results of the geophysical modeling for the shallow geophysical applications in engineering, environmental and archaeological studies. The site has chosen to simulate most of the subsurface utilities, cavities, different environmental and archaeological materials. The selected buried materials that were hosted by different types of sediments have been defined accurately with controlled coordinates (x, y, z). Different geophysical surveys have been carried out along the planed level site before starting the buried process. Then different techniques are used to locate the different buried targets and compare the resultant signals with the actual body parameters. Such procedures can greatly help in calibrating different geophysical systems, train the students in a controlled site, choose the optimum geophysical system for each subsurface target and conditions, test the performance the different geophysical surveying practice, as well as ease the implementation of the forward calculations over different buried objects.