

## Stabilisation used for Winchester's Olympic standard stadium



*The new stadium that will be used as a pre-Olympic games training camp for 2012*

### Introduction

Following invited competition, the University of Winchester appointed Britpave members Smith Construction to design and build their new sports facility for a 9-acre site on what was formerly known as King Alfred's Sportsfield.

The setting by the South Downs required a sensitive approach, and the superb new facility fits into the landscape as if it had grown there!

### Design

The development work began in September 2007 for an Olympic standard arena, providing facilities for a 400 m eight-lane athletics track, long and triple jumps, high jump, pole vault, shot putt and discus, plus a full-sized all-weather hockey and general sports field.

Smith's design team ensured that a proven drainage and storm attenuation system was incorporated with drainage swales. The site required a fairly extensive cut and fill operation in order to achieve the correct levels on which to build the track.

The company has pioneered the stabilisation process within the sports construction

industry. Many sports facilities are constructed on natural grass sports fields which are sometimes on made up grounds. The area is made up with the original spoil from building the school or club house, and so stabilisation enables sports surfaces to be installed in areas that otherwise might be problematic, as the levels of the finished sports surface are required to remain true throughout the life of the facility.

### Construction

When the site is on a slope, generally cut and fill methods of construction are considered not suitable for track developments due to the risk of differential compaction affecting the strict surface regularity requirements of the sports governing bodies.

However, stabilisation of the ground has alleviated this problem for Winchester University. The finished bitmac surface tolerance of the track has to be  $\pm 1$  mm before installation of the final polymeric surface to ensure the  $\pm 3$  mm tolerance required for IAAF certification. A comprehensive drainage system was incorporated to ensure the surface is not put out of action during wet weather conditions.

