Project / Case study



Lancashire County Council

Bishop Rawstorne CE Language College,

Design: Duncan Ross Ltd

Project Brief:

Design and installation of intensive piped drainage system to existing playing fields and design and construction of a new, intensvely drained playing field.

Project Overview

The project undertaken at Bishop Rawstorne was one of many successful projects undertaken for Lancashire County Council as part of the Council's multi-million pound School Playing Field Improvement Programme between 2002 and 2012.

The project objective was to improve the standard of the existing playing field and to enhance overall sportsturf availability and playing capacities at the college so that maximum utilisation could be maintained throughout the year. The principal elements of our project solution involved:

- Groundworks and site reprofiling, involving 1,250m³ of grading works to improve site gradients and form smooth finished levels. Recognising the Client's desire to maximise outputs from the available project budget and to minimise environmental impact, arisings from the drainage installations were utilised in the reprofiling works.
- Construction of a new primary piped drainage instsallation using the latest laser guided technology comprising 7,175m of 80mm diameter perforated platic lateral drains and 500m of main drains up to 160mm diameter (a further cost saving measure worked into our design involved retention of as much as possible of the existing main drainage infrastructure and outfalls).
- Construction of various silt chambers and manholes to keep the system silt free and maintainable.
- Drainage intesification to an area of 30,700m², involving construction of 300mm deep sand slits at 1.0m centres across the line of lateral, piped field drains.
- Supply and application of circa 950 tonnes of medium fine sand dressing.
- Vertidraining, cultivation, seeding and fertilising to playing surfaces, run-off areas and surrounding grass surfaces totalling 33,000m².
- Initial maintenance of both existing and newly constructed playing surfaces to esnsure satisfactory establishment prior to handover to the Council's maintenance department.