

## Greenhead & Beechcliffe SEN Schools

PDS1002

### Who:

Bradford Local Education Partnership (LEP)

### Where:

Greenhead Road, Utley,  
Keighley, West Yorkshire BD20 6EB

### What:

Stormwater attenuation system

### Project management:



### Engineers:



### Contractors:



## Background to specification

Under the Building Schools for the Future programme, Greenhead School was to be fitted with a stormwater attenuation system which included large grounds with a sports field and running track.

Although cellular systems were another option originally considered, contractors Howard Civil Engineering had used us for a number of years on a range of projects, and advised Educo/Ferrovial and Bradford LEP that our steel tanks offered a number of advantages.

We presented the technical and commercial case for its systems to the project management in March 2009 and was subsequently appointed.

Our field sales and design team worked with HSP in reaching the final bespoke solution, which included a series of seven tanks in total to serve the layout and fall of the tiered site.

Four of these would be our new more compact Twinstore installations.

## Key criteria



One of the key aspects was fitting a tank of sufficient capacity for the playing field but within the running track. This alone ultimately required a single tank with a gross volume of 6541 m<sup>3</sup>.

Manufacture to HA Standard BD 12 made our steel pipe systems supremely fit for purpose, being capable of temporary construction loads during the construction phase. Besides rivaling cellular systems on space, therefore, it also won on structural integrity.

Besides competing on performance, costs and speed and efficiency of installation must not only be line with the project but ideally enable savings in time and budget.

Tubosider United Kingdom Ltd,  
10 Sutton Fold Industrial Estate,  
Off Lancots Lane,  
Sutton.  
St Helens. WA9 3GL

## Supporting you from the ground up.

Call us: 01744 452 900  
Email us: info@tubosider.co.uk  
Visit us: www.tubosider.co.uk

## Greenhead & Beechcliffe SEN Schools

PDS1002

### Solution and benefits

A total of seven of our tanks, four of them Twinstore in design, have been installed to serve the site and feed rainwater into the public sewer at a correctly managed rate.

Twinstore is a new stormwater system designed by us to compete on void performance with thermoplastic chambers which wins out over conventional systems by achieving gross volume through a combination of pipe structure and void ratio in the backfill. It balances water freely between the pipes and the backfill contained within an impermeable membrane.

Installed beneath the permeable asphalt sports field and running track, the 6541 m<sup>3</sup> tank at the heart of the

project is believed to be the largest in any UK school and is the largest yet produced since the recent development of the Twinstore system. Furthermore, this tank was assembled within only 12 working days.

Using lightweight steel pipes made handling and installation quick and simple for a small trained team, with no need for heavy lifting gear.

Easy access and maintenance were also part of our case. All its steel pipe systems, Twinstore included, offer easy access via manholes to carry out any cleaning, and because silt cannot escape from the pipes, it is a simple job for a gully cleaner if ever that is needed.



Tubosider United Kingdom Ltd,  
10 Sutton Fold Industrial Estate,  
Off Lancots Lane,  
Sutton.  
St Helens. WA9 3GL

**Supporting you from the ground up.**

Call us: 01744 452 900  
Email us: info@tubosider.co.uk  
Visit us: www.tubosider.co.uk