

# **Whitworth Community High School**

Rochdale

Replacement buildings were needed for a 750-place secondary school after the original buildings had come to the end of their lifecycle. Our scheme resulted in a significant carbon saving over a CFA solution.



## The project

The new school comprised a two and three-storey main teaching block.

### The challenge

The main challenge was to provide a solution through variable Glacial soils to accommodate relatively high column loadings of 3500kN while facilitating the construction of shallow foundations and a ground bearing slab.

### The solution

RIs were installed for the foundations to achieve a bearing capacity of 175kN/m2. VSCs were used to support the more lightly loaded floor slabs. This combination offered our client significant time and carbon savings over the original piled option (see graphic).

## **Project facts**

Owner(s)

Department for Education

**Keller business unit(s)** 

Keller UK

Main contractor(s)

Wates Construction

**Solutions** 

Bearing capacity / settlement control

**Markets** 

Institutional/public

**Techniques** 

Rigid inclusions Vibro stone columns

#### **Email address**

foundations.uk@keller.com

**Phone number** 

02476 511266