



Belmont WwTW, Bolton

May 2004

Client: United Utilities / HMB Alliance

As part of the ongoing upgrading to the water network in the North West, Belmont WwTW required new facilities to meet demand. Due to the very limited access through country lanes, the steep incline into the site, and the close proximity of the original tank; small lightweight drilling machines were required to drill piles for a new balancing tank. After working closely with HMB alliance, Systems Geotechnique Ltd won and designed the piles to support the tank.



50 No piles to support the tank were constructed in 2.5 weeks. The 500kN piles were drilled at 200mm diameter to 8m; 3.5 to 4m consisted of a rock socket into the underlying sandstone. Bores were then filled with a high strength grout and reinforced with single T32 Bar.

After work had been completed, 3 No piles were dynamically tested to 1.5x working load.