

Trent Bridge Cricket Ground, Nottingham

Nottinghamshire County Cricket Club went one step further to ensure an enhanced visitor experience at Trent Bridge Cricket Ground. To allow play to carry on into the evening, the club installed floodlights at the ground. This makes Trent Bridge the only cricket ground in the country with permanent floodlights.



Client:	Nottinghamshire County Cricket Club
Main Contractor:	Clegg Construction
Architect:	Maber
Consulting Engineer:	Brealey Green LLP
Value of Project:	£8m
Value of Foundations:	£70,000
Duration of Works:	6-8 weeks
Scope of Works:	5 x piled bases for 40m high floodlights

The floodlights form part of a contract to improve the ground and increase capacity. The main contractor, Nottingham based Clegg Construction installed a new stand at the ground with All Foundations Ltd undertaking the piling works for the floodlights.

Trent Bridge Cricket Ground is situated in a residential area with a busy main road at one side. Access to the site was very tight so All Foundations used their D50 restricted access drilling rig. The floodlights were installed in strategic places due to the access situation:

- 2 installed in existing car parks
- 1 installed behind the score board
- 2 installed next to an existing stand (which was temporarily dismantled for the works)

Foundations

Each floodlight required 8 x 190mmm ODEX piles due to unconsolidated ground in the area which tends to cave in around the drilled hole. The ODEX system allows the contractor to drill a hole and pull a pile casing tube down behind it.

Once they reached solid ground, a 150mm rock socket was installed using a rig with a percussive hammer. The piles were 20m deep because they needed to act both in compression and tension as the floodlights are high and would be subject to movement by the wind. The load per pile was 215kN.

Tony Oliphant, Midlands Area Manager for All Foundations says, "We enjoyed working on such an unusual project. Although access to the site was tight, All Foundations had the right rig for the job. The ground conditions are quite common in this area so we were used to dealing with this type of piling."

The ground was built in 1838 and hosted its first international cricket match in 1899. They can at last, offer visitors the luxury of a full day of cricket without the need to finish the game early. Such a high profile sporting venue needs to offer this enhanced visitor experience and All Foundations are sure that many other venues around the country are planning similar enhancements.