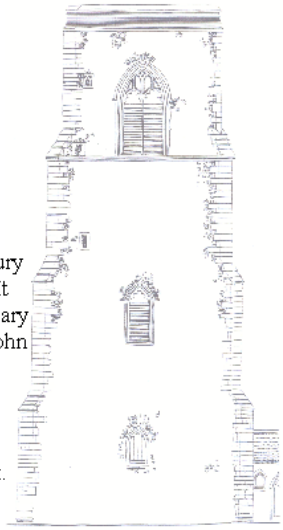
Project Report

D.H.D
Structural

Derlyngton Tower
The Great Hospital



Client: John Youngs Ltd

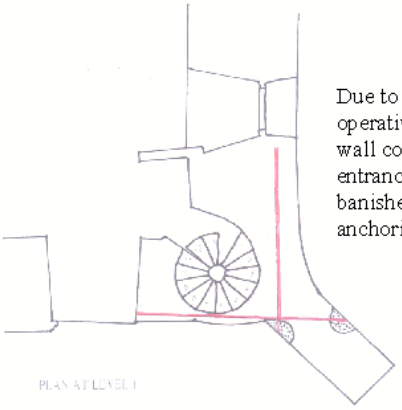
Structural Engineer: Alan Gentry

Architects: Wearing Hastings & Norton

The Great Hospital in Norwich was founded in the 13th century and, by the late 14th century, a huge chancel had been built. It was also at this time that a bell tower was added to the infirmary hall at a cost of £100.00, the majority of which was met by John Derlyngton.

This medieval flint bell tower had severe cracking to the Staircase. The walls to the tower were, in places, 1m thick, but around the staircase the flint work was only 180mm thick.

To stabilise the tower we had to drill and install over 65m of Cintec anchors. Drilling had to take place from the far side of the buttress, and all drilling positions had to be exact due to the fact that most of the 50mm diameter holes were over 4.1m long. There were three pinch points to each hole where the drill bits passed as close as 60mm from either the outside or inside of the tower wall.



Due to the expert drilling knowledge and skill of our operatives, previous concerns that a 180mm thin flint wall could not be accurately drilled blind from an entrance point on the far side of the buttress, were banished as we completed all the drilling and anchoring with 100% success.