

## Case study



# Lincolnshire International Bomber Command Centre (IBCC) and Memorial Spire

The IBCC is a public facility honouring the 58,000+ men and women who lost their lives serving or supporting the RAF Bomber Command in WWII.

Alan Wood & Partners (AWP) provided Civil and Structural engineering and delivery, including foundation design, structural stability, calculations, FRA and SUDs drainage along with Geotechnical Investigations (Phase 1 and 2) for the Memorial Spire, supporting infrastructure and landscaping.

The Memorial Spire was designed with architectural references to the Avro Lancaster Bomber and has an overall height of 102ft (31m), equal to the wingspan of the Avro Lancaster, and base width of 16ft (5m), equal to the width of the Lancaster Wing. The Spire is the UK's tallest war memorial and constructed of Corten Steel. The orientation of the Spire allows visitors a view of the Lincoln Cathedral, a welcoming landmark to those returning from sorties during WWII. Due to the size of the Spire, challenges arose during structural design, assembly and erection to ensure it could withstand the elements and avoid distortion.

The Chadwick Centre is a steel framed structure of complex shape with suspended reinforced concrete ground and first floor. Radon protection measures were built into the substructure. The site also features a paved memorial area and steel wall panels surrounding the spire. AWP designed the infrastructure providing a solution aligned with the natural surroundings. The site was an important archaeological area for the Roman period, and the project had to adapt to allow for archaeological excavations after fieldwork unearthed 25 Roman Skeletons.



Location:  
Lincoln



Client:  
The Lincolnshire Bomber  
Command Memorial Trust



Architect:  
Place Architects



Value:  
£6m



Civil  
Engineering

Structural  
Engineering

Geotechnical &  
Geoenvironmental

Engineer/  
Manage/  
Deliver/