

Assisted Living Facility for the Visually Impaired



Location:
Wilberforce House, The
Grove, York, North
Yorkshire



Client:
William Birch on behalf
of The Wilberforce Trust



Architect:
West & Machell



Value:
£8m



Civil Engineering

Structural
Engineering

Building Consultancy

Geotechnical and
Geoenvironmental
Engineering

Project Management

Specialist services

The Wilberforce Trust has supported blind and partially sighted people across York since 1833.

Wilberforce House is the Trust's vision to deliver an innovative extra care housing scheme designed especially for people with a visual impairment and other disabilities. It offers 30 one-bed, open-plan apartments along with a Living & Learning Zone – providing education and leisure activities – a courtyard cafe and offices for the Trust; whose new HQ is located within this beautiful new development.

Engineering and Design Factors

A complex, split-level design proposed by the Architect on a sloping and geotechnically poor site, required innovate engineering from Alan Wood & Partners to ensure the project met stakeholder aspirations in respect of constructability and budget. Foundations were designed using a vibro-piled solution to avoid the expense associated with traditional piled foundations, and the aspirations for an interesting and complex façade required a hybrid load-bearing masonry and steel-framed structural solution to be adopted throughout. Further, Alan Wood & Partners utilised their in-house expertise and the latest engineering software to detail all civil and structural aspects, allowing detailed coordination with other disciplines and ensuring complex interfaces were managed effectively.

Description of the Works

Working initially for the client directly, then with the Design & Build Contractor, Alan Wood & Partners were engaged to provide full civil and structural engineering services for the proposed development, which included the design of a hybrid load-bearing masonry and steel-framed solution on vibro-piled foundations. In addition, Alan Wood & Partners undertook the site wide hard landscaping and level design, including highway and drainage elements.

Core services

Civil Engineering / Structural Engineering

Sectors

Health, Social Care and Bluelight / Residential