

New Border Control Facility









Civil Engineering

Structural Engineering

Consultanc

Geotechnical and Geoenvironmental Engineering Project Management

Specialist services

Construction of a border control facility for the inspection of goods going out and coming into the UK with offices, cold rooms and service yard for truck parking.

Engineering and Design Factors

The ground investigation revealed soft layer of peat at a depth of about 4.0m which precluded traditional foundations. The site was previously occupied by a cooling tower, but it was unclear if the remnant of its concrete base was removed. Alan Wood & Partners engaged with the site team to probe drill to locate this and adjust the foundation layout to avoid the obstruction.

Description of the Works

Alan Wood & Partners was appointed to carry out the civil and structural design of the facility including geotechnical and geo-environmental investigation to inform the design of the substructure and any requirements for remediation. The superstructure for the goods checking and holding areas comprised a steel portalised frame supported on piled foundation. Due to time constraint, the office building adopted a simple single storey steel structure sat on a raise concrete slab supported on precast concrete retaining structure built off piled foundation.

Core services

Civil Engineering / Structural Engineering / Geotechnical and Geoenvironmental Engineering

Sectors

Project: New Border Control Facility

Alan Wood & Partners