

## Case study

# Battery Energy Storage Site (BESS) & 132kV Grid Connection

Burwell BESS is a cutting-edge lithium-ion battery storage facility with a capacity of 56.2MWh, sufficient to power thousands of homes.

Due to location of the site, with The Weirs watercourse surrounding three sides, Alan Wood & Partners (AWP) were required to call on their considerable skill and expertise to design a new access bridge to carry both construction plant and power transformer delivery vehicles and enable the development to be constructed. Due to programme constraints, Alan Wood & Partners also designed structural steel grillages supported from pier foundations, to assist site teams with battery and PCS installation, and ensure critical equipment could be located above predicted flood levels or protected accordingly.

Working directly for the EPC contractor, AWP were engaged to provide full civil and structural engineering services for the proposed BESS and 132kV grid connection, which included geotechnical design, structural design of all plant foundations, transformer bunds, switch rooms, plant support grillages, site wide surfacing and drainage. In addition, AWP undertook the design of a new 10m access bridge, across The Weirs to enable construction plant to access the site.



Location:  
Burwell



Client:  
Ethical Power  
Connections Ltd. On  
Behalf of SMS Plc.



Architect:  
Ethical Power  
Connections Ltd



Value:  
£30m



Civil  
Engineering

Structural  
Engineering

Geotechnical and  
Geoenvironmental

Engineer /  
Manage /  
Deliver /