



Case Study

Native River

Project: Civil and building construction for a new energy storage facility, Cheshire

Client: Ethical Power Connections

End User: Varco Energy

Services Provided: Civil Engineering
Building Construction



Summary:

Delivered the enabling civil and building infrastructure works for a new Battery Energy Storage System (BESS), transforming a greenfield site into a fully serviced and grid-connected energy storage compound.

Scope of Works:

- Ground investigation, soil removal and reprofiling of the greenfield site.
- Installation of 500m+ precast concrete troughing for serviceable cable routes.
- Reinforced concrete foundations and ground-bearing ring beams.
- Installation, testing and commissioning of below-ground drainage systems and new outfalls.
- Construction of permanent maintenance access roads with quarried materials and kerb demarcation.
- Installation and commissioning of fire suppression systems and hydrants.
- Earth mat installation and earthing systems.
- Installation of palisade fencing and secure perimeter infrastructure.

Project complexities, simplified by Alpha:

- Greenfield reprofiling and ground validation, including GI investigations, soil sampling and controlled earthworks to establish a compliant development platform.
- National Grid interconnector installation, liaising with third-party asset owners to integrate the BESS facility into existing substation infrastructure and ensure seamless handover.
- High-volume service infrastructure within a confined footprint, including installation of over 500m of precast cable troughing while coordinating piling, heavy-lift and HV contractors.
- Integrated drainage and fire suppression commissioning, forming new outfalls to existing watercourses and delivering compliant fire protection systems.



Project Outcome:

- ✓ **De-risked greenfield development** through engineered ground preparation.
- ✓ Delivered **compliant National Grid interconnector** integration.
- ✓ **Maintained programme certainty** within a multi-contractor environment.
- ✓ Provided **durable, maintainable civil infrastructure** for long-term performance.
- ✓ Achieved **compliant environmental, fire and security systems** at handover.

