

### Project Information:

<b>Consulting Engineers</b>	W A Fairhurst
<b>Blackwell Role</b>	Main Contractor
<b>Form of Contract</b>	NEC Option A
<b>Contract Start</b>	January 2010
<b>Contract Period</b>	45 weeks
<b>Contract Value</b>	£11.2M

### Blackwell Site Management:

#### Contracts Director:

Steve Johnson

#### Contracts Manager:

Jim Wilkinson

#### Project Manager:

Lee Swift

#### Project Office:

##### Scottish Regional Office

Suite 3, Epoch House, Falkirk Road,  
Grangemouth. FK3 8WW

Tel. 01324 483713



### Services Include:

Civil Engineering    Earthworks    Geotechnical    Remediation



### Contract Summary:

Blackwell were appointed Principal Contractor for the south section of the Clyde wind farm, following the completion of the enabling works contract. Clyde wind farm is the largest single consented scheme in Western Europe and will generate 350Mw when complete.

The south section was the first phase to be awarded and comprises civil engineering works to permit the installation of 56nr 2.3Mw turbines located across approximately 650 Ha of the Scottish uplands.



Blackwell were responsible for undertaking a detailed review of quantities, material quality and earthworks logic/distribution throughout the tender stage culminating in the submission of a fixed price contract.

### Key Processes:

The main scope of the work included the following:

- Earthworks to form new tracks and widening of existing tracks. In total there was approximately 35km of tracks to be formed under this phase with almost 1 million cubic metres of earthworks to undertake.
- Managing peat and construction of floating roads over deep peat deposits.
- Excavation and processing of rock to form track and hardstanding topping material, thus avoiding the need to import these materials to site.
- Construction of crane hardstanding areas, each turbine base requires a crane hardstanding area from which the wind turbine can be erected.
- Permanent works drainage, the site is very undulating and reaches 550m above sea level, requiring significant drainage installation on very challenging terrain.
- Construction of reinforced concrete bases for the wind turbines, each base comprises of approximately 350cu.m of concrete which was batched on site using our own mobile Rapidbatch 120 plant. The bases are 3.5m deep and are founded on bedrock, totalling 55t of steel reinforcement.
- Construction of transformer bases and met mast foundations.
- Construction of permanent access points from the existing highway.
- Undertaking trenching and ductworks for the electric and SCADA cables.

