

Tippethill Wind Project

Single EWT Directwind 54 HH50 turbine



Green Cat Contracting acted as Balance of Plant Contractor for Temporis Wind providing welfare, site supervision and management throughout the entire project from breaking ground to installation and commissioning of the turbine.



Key Elements:

- Site documentation including the CPP; inductions and works programme.
- Site safety inspections and supervision during all phases of construction.
- Maintaining site welfare facilities.
- Ensure all workers and visitors to the site signed in and underwent an induction.
- Ensure the works adhered to the development programme.
- Maintain Risk Assessments and Method Statements for activities on site



Enabling Works – Phase 1

Site work started in early January of 2015. GCC began with widening the existing access track and construction of a new track. Once track construction was complete, work commenced on the crane pad and foundation excavation. Approximately 80% of the hardstanding was constructed to facilitate foundation works, the remaining 20% was completed after foundation installation.



Turbine Foundation – Excavation

Design concluded that the foundation formation was to be at a depth of 2.5m meters, once excavation was completed geo-grid and structural fill were used to create a base for the turbine foundation. The base was load tested and blinded ready for foundation installation.



Turbine Foundation – Reinforcement

After blinding steel work began, with L-bars placed around the centre and bound with tying wire, creating a steel mat. Once the mat was in place, the turbine anchor was lifted into position and the reinforcement completed.



Substation Foundation

During pre-pour checks foundation work for the substation commenced, with a pit being dug, type 1 backfilled and compacted before being covered in concrete blinding and wood shuttering erected.



Concrete Pours

Shuttering was erected around the outside of the turbine steelwork upon completion of pre-pour checks. The shutters were made from steel that could be bolted together and could be reused on later sites.



Once all shuttering was complete the turbine and substation foundations were poured on the same day, and stripped within 48 hours.



Substation – Block Work

After the wooden shuttering had been stripped from the substation foundation. The brick outer walls were constructed, and roof installed.

Enabling Works – Phase 2

With the turbine foundation now complete the excavation was backfilled to original ground level, covering all bar the turret of the foundation. The site was deemed ready for the turbine parts to begin arriving for assembly.



Shortly before the first deliveries it was highlighted that the bend in the access track would not be wide enough to accommodate turbine delivery.

Green Cat Contracting personnel were arranged for further track works to be completed with little notice. With the defect rectified the turbine was delivered and erected as planned.



Completion

By late June the substation was complete, turbine erected and site ready for energisation and G59 testing. The remaining remedial works to fencing, gates and demobilisation were undertaken promptly, ensuring the landowner was satisfied at the end of the project.



Green Cat Contracting

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