

PRESS RELEASE LinkedIn • Facebook • Twitter • Instagram • YouTube

Delivering Galloper Onshore Substation

With the development of Galloper Offshore Wind Farm underway, an extension of the fully operational Greater Gabbard Wind Farm off the coast of Suffolk, Collett were tasked with providing transport logistics for a 180 Tonne Transformer destined for the onshore substation.



Originating in South Korea the Super Grid Transformer, which measures an impressive 8.7m (L) x 4.9m (W) x 4.7m (H) was scheduled to arrive at the Port of Lowestoft via Rotterdam in late September. With the instruction of the project, on behalf of Hemisphere Freight Services, beginning in June this provided a tight four month timescale in which to plan, execute and complete the delivery.

Working closely with Hemisphere Freight Services Ltd and Robert Wynn & Sons, a solution for transferring the transformer from the originating vessel at Rotterdam to the specialist RoRo barge, the Terra Marique was devised. In collaboration Collett, Hemisphere and Wynns engineered specialist calculations and technical drawings of the loaded cargo to confirm the transformer's stability and safety whilst on board the vessel. On arrival in Lowestoft the vessel's hydraulic roadway would provide the option of delivering onto varying quay heights enabling the approach during high tide.

Once in Lowestoft the next challenge would be to transport the cargo the 27 mile journey from portside to delivery site. With the transformer loaded to Collett's specialist girder bridge for the journey the entire combination would feature 20 axles, two tractor units in push pull formation and an overall length of 70.5m which would require the route to be scrutinised in meticulous detail to ensure safe passage. The proposed route navigated the towns and villages of Lowestoft, Kessingland, Wrentham, Wangford, Blythburgh and Yoxford and as a result would require intricate planning and surveying to ensure the safe passage of the 70.5 (L) x 5.3 (W) x 4.8 (H) loaded vehicle.

Undertaking a visual route inspection two months ahead of the proposed transport date, Collett's Projects Division surveyed the route in detail and identified several modifications which would be required to enable the loaded girder bridge to safely travel to its required destination. This included the removal street signage, traffic lights and the trimming of foliage to guarantee the vehicle would over sail the landscape.

As the deadline for the transformer's arrival grew ever closer Collett's meticulous planning ensured the seamless delivery of the project. Having undertaken visual route inspections, swept path analysis reports, lifting plans, transport arrangements and jacking & skidding calculations Collett had all bases covered and we were ready to begin.

In late September the vessel arrived at the Belvedere Quay where the awaiting Collett Team set to discharging the cargo.

Utilising a 10 axle SPMT with hydraulic capabilities Collett boarded the Terra Marique to self-load the 180 Tonne transformer from its secured position within the hold of the barge. As the vessel dropped the hydraulic roadway Collett manoeuvred the cargo portside where it was positioned on stools to allow for assembly of the girder bridge. The loaded combination then remained portside ready for onward transport.

PRESS RELEASE

LinkedIn • Facebook • Twitter • Instagram • YouTube

Collett

EXPERTS IN MOTION

At 8:30am on Saturday 1st October the convoy began its journey. Travelling under BE16 permit, and with both police and private escorts, the Collett Team left the Port of Lowestoft and began the pre-planned journey. Destined for Leiston the combination navigated country roads, several roundabouts and traversed two level crossings all at a maximum speed of 12mph throughout. With onlookers lining the streets keen to capture a glimpse of such a heavy transport project in progress the convoy meandered its way along the route arriving seven hours and several villages later on approach to the site entrance. Having completed stringent height checks to ensure the loaded vehicle did not exceed the minimum clearance distances for the overhead lines the convoy safely made its way onto the construction site.

Arriving at the substation the final stage of the project began, delivering and positioning the transformer to the awaiting plinth. Throughout the extensive planning of the project Collett also implemented detailed jacking & skidding stress and pressure simulations to analyse the skid track behaviour and stress distribution across the system throughout the movement. Replicating the movement of the transformer across the 400 Tonne capacity jacking and skidding system allowed Collett to check pressure, stresses and deformations across the track to ensure maximum safety. With the jacking and skidding system already on site the Team began the task of unloading the transformer to the awaiting plinth before aligning and jacking & skidding to its final position.

Throughout the planning and execution of the project Collett Teams liaised directly with Hemisphere Freight Services, local councils and constabularies, Network Rail and marine transport specialists Robert Wynn & Sons to ensure the seamless delivery of the project from start to finish.

- ENDS -

More about <u>*Collett & Sons Ltd*</u>: Experts in Motion since 1928 Collett have a wealth of experience transporting difficult and abnormal loads throughout the UK, Europe and worldwide. Their specialist fleet operates across depots in Halifax, Goole, the Port of Grangemouth, and most recently Collett (Ireland) Ltd in Dublin. Experts in the transport of abnormal loads, <u>*Collett*</u> are your global professional partner for <u>transport</u>, <u>heavy lift</u>, <u>marine</u> & <u>transport consulting</u>.