

CASE STUDY

PROJECT: GEOTECHNICAL SITE INVESTIGATION FOR ON-SHORE CABLE ROUTE
LOCATION: LINCOLNSHIRE & NORFOLK
VALUE: £140K

BACKGROUND

The 'Lincs' off-shore wind farm project is just one of 5 wind farms projects which are in various stages of development in the Lincolnshire Wash. The Lincs wind farm alone will provide a total capacity of up to 250 MW supplying electricity to 150,000+ homes.



Harrison Group Environmental was awarded Principal Contractor status by Centrica Ltd., to complete the geotechnical site investigation for the proposed on-shore

electricity cable route. This followed the success of our involvement in the Sheringham Shoal wind farm onshore cable route investigation. Our investigation covered the area from the landfall of the cable at Sutton Bridge to the proposed receiving electricity substation at Walpole St. Peter.

SCOPE OF WORK

Our brief was to investigate the ground conditions along the cable route; including examination of the expected geology, testing of geotechnical properties of the soils including thermal resistivity, identification of potential hazards to the directional drilling and foundation recommendations for the sub-station site.



Harrison Group Environmental designed the investigation based on a scope of works provided by the Client. Fieldwork was carried out over a period of three months including access by boat to the intertidal area within The Wash. Intrusive investigation included cable percussive



boreholes, cone penetration testing and trial pits. Samples were taken to assess geotechnical properties of the soils. Geophysical analysis included thermal resistivity of the soils and seismic refraction/reflection to determine the underlying geology of the salt marsh which was inaccessible to plant. Utilities surveys were also carried out at each of the proposed crossings.



As part of our duties as Principal Contractor we put together a detailed Health & Safety plan which covered all aspects of the site investigation process.

OUTCOME

All site works and reinstatement were completed on schedule, without incident and to the satisfaction of the client.

