

## Viking Link – Temporary Hauls Roads

<b>Project</b>	JJM2516 – Haul Roads
<b>Location</b>	Bicker Fen Lincs
<b>Client</b>	Siemens / National Grid
<b>Key works delivered</b>	Treating Stockpile of 6E material to create 9A material for building temp Haul Roads
<b>Project Duration</b>	Jan 2021 - 12 weeks
<b>Stabilised Area</b>	12,000m <sup>2</sup>
<b>Earthworks</b>	By JJMac



### PROJECT OVERVIEW

- 3.0k of new Cable Haul Road from Converter Platform to NG Substation
- 6,000m<sup>3</sup> Stockpile of material had been lifted from previous Haul Road and contaminated with subsoil and Geo Textiles during the lifting process.
- Stockpile of material could not be used without being classified and a treatment plan implemented.
- JJMac tested and classified the material as suitable for CBM cement bound material

**PROJECT CHALLENGES**

The project was very challenging as all the material had to be treated ex-situ at the stockpile and carted to the road box where it was placed and compact. NDM and CBR testing required at all stages of the works to ensure the material was compliant with NG specification. Stabilised material could not be trafficked directly for 72hrs to allow curing. Various Bio Diversity restrictions including Organic Farming and Returning the land to original state.

**Stockpile material****ENGINEERING AND SOLUTIONS TO OVERCOME THE CHALLENGES**

**To overcome the project challenges, set by the client, our team:**

- Worked with the client and advised on the findings of the Stockpile material testing and classification.
- The challenge was to turn the 6E material into 9A material by mixing with cement and complying with the stringent testing regime.
- Our site team set to work. Mixing the stockpile material at the Stockpile and carting to the Haul Road construction area.
- JJMac team devised a methodology to overcome the direct trafficking by placing 150mm protective layer of untreated material from the stockpile.
- The 150mm layer was treated in-situ once the haul was complete. The final treated layer was trimmed with GPS dozer to 30mm tolerance and compacted



### Earthworks and Stabilisation during Construction Phase

Mixing Area Prepared



Ex-Situ Cement Mixing



Stockpile material Cement Mixed and carted to site for placement and compaction in the road box.

All Earthworks and Drainage carried out by JJMac working with Siemens and the land owners to ensure that all Bio Diversity measures were adhered to at all times.



Top 150mm layer In-Situ Mixed with JJMac Dustfree equipment proved very successful working in such Bio sensitive surroundings

All Trimming and Compaction by GPS controlled machines



### ADVANTAGES

The works had numerous advantages to this site.

- Re-use of Granular material from another Haul Road saving disposal costs.
- Elimination of Primary Aggregates on the Haul Road
- Elimination of Stone Lorries from the Villages and surrounding Road

### BENEFITS TO CLIENT

