



Attaching the pull-wire to the pulling sock

Note the open pulling and jointing pit (centre of photo) and cable easement (in background).



Cable easement prior to reinstatement, with link box.



Cable easement after reinstatement, with link box in foreground.

## Share your views & keep up to date

If you have ideas about how to minimise impacts, or issues or concerns regarding how we plan to undertake the installation process for onshore underground export cables, please get in touch.

You might also like to highlight relevant groups, stakeholders or data sources we should consult on this theme.

To contribute your views, register your interest and keep up to date with the project, use one of these means:



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# Norfolk Vanguard & Norfolk Boreas Information Sheet:

## Installation process for onshore underground export cables

# Installing onshore export cables

This leaflet illustrate stages in the export cable works for Ray wind farm (Northumberland) undertaken during Spring / Summer 2016. These works were procured and managed by Vattenfall, and required 2 x 33kV export circuits ie. 6 x single-core cables.

## Stage 1 - preparation



Section of cable easement with topsoil stripped prior to trenching operations.

Note topsoil storage mound (on left) to safeguard soil quality and temporary fencing to delineate working area.

## Stage 2 – Installation of ducts



Installation of ducts in excavated trench.

Note imported sand used as bedding in trench bottom.

## Stage 3 – Back-filling

Back-filling operations after duct installation.

Note imported sand used to cover the ducts. Protective tiles are then laid over the ducts before back-filling with 'native' material.



Below: Section of cable easement after completion of duct installation and back-filling operations.



## Stage 4 – Re-instatement



Section of cable easement after replacement of topsoil and re-instatement of ground cover.

## Stage 5 – Cable pulling



Preparation for cable pulling operation.

Note cable drum on trailer, and use of 'pulling sock' to attach the end of the cable securely to the pull-wire.