

ARBORICULTURAL METHOD STATEMENT FOR THE INSTALLATION OF UNDERGROUND CABLES BENEATH TREES AND WOODLAND

It's proposed that a trenchless technique is used to provide a route for the onshore cables required for the new wind-turbine facility as they cross the root protection areas (RPAs¹) required by adjacent trees or woodland. This is a methodology that avoids disturbing the parts of the soil where tree roots are likely to be growing. The pits for starting and receiving the drilling machinery must be located outside of the RPAs of all trees. The bore must be made at a minimum depth of 60cm below ground level so that tree roots are avoided.

All trees and ancient woodland adjacent to the onshore works will be protected using temporary fencing. If an arboriculturist is present when the fencing is being installed then the separation distance can be calculated using the methodology detailed in BS5837:2012² but if there is no-one familiar with this methodology present on site a piece of string should be wrapped around the tree at a height of 1.5m and once this length has been marked the separation distance can be worked out by placing this length on the ground four times in a direct line away from the trunk. This measurement will identify the extent of the tree protection zone that will be required; appropriate fencing should be installed to protect this ground. It's crucial that this temporary fencing is installed before any ground works commence.

Access for site staff and construction machinery must be on planned routes only. These routes must either be outside of the RPAs of trees and woodland or on established tracks or footpaths so that disturbance of trees and woodland is avoided.

When it is time to carry out the drilling operation and install the cables the following procedure must be followed:

1. Install tree protection fencing.
2. Establish working areas and access routes.
3. Ensure that an arboriculturist is on site before any excavations take place near trees.
4. The arboriculturist must check that the fencing is appropriate for effective tree protection.
5. Dig pits required for drilling equipment and operation.
6. Carry out drilling and installation of ducting/cables.
7. Remove all equipment from work area.
8. Remove temporary tree protection fencing.

¹ The root protection area (RPA) is a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of roots and soil structure is treated as a priority.

² British Standards Institution (2012). BS5837 Trees in relation to design, demolition and construction – Recommendations. BSI, London.

GENERAL PRECAUTIONS FOR TREE PROTECTION

All construction staff should be made aware of the following restrictions that apply to construction exclusion zones:

- During construction no protective fencing is to be moved or dismantled without written permission from an arboriculturist.
- Movement of heavy mechanical plant (excavators etc.) must not be undertaken within the RPAs of trees, except on existing hard surfaces, in order to prevent unnecessary compaction of the soil.
- Spoil or any other materials must not be stored within tree RPAs.
- Care must be taken when planning site operations to ensure that wide or tall loads, or plant with booms, jibs and counterweights can operate without coming into contact with retained trees.
- Potential contaminants such as diesel oil, cement and bitumen must be stored at least 10m from any trees, with provision made for any spillage or run off to be contained away from protected areas.
- Don't attach any signs or hoardings to tree trunks.
- No fires should be permitted on site.
- If the trunk or branches of a tree are damaged in any way advice should be sought from the local authority tree officer/arboriculturist.

If contractors need any advice on tree protection measures during the course of the project they should contact Bosky Trees on 01373 832778 or info@boskytrees.co.uk.

