Dogger Bank C and Sofia Offshore Wind Farms Onshore Works

CoCP Appendix 4.6

Method Statement for Crossing of Watercourses

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Dogger Bank C and Sofia Offshore Wind Farms **CoCP Appendix 4.6 – Method Statement for Crossing of Watercourses**

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1 Introduction

1 This high-level Method Statement for crossing of watercourses has been produced to support the Code of Construction Practice (CoCP), and to fulfil Condition 9 of the Town and Country Planning Application #1 (TCPA #1, as defined further in the Glossary) and Requirement 27 of the Dogger Bank Teesside A & B Offshore Wind Farm Order 2015 (as amended) (the Development Consent Order, herein 'the DCO'). The measures set out within this Method Statement will be included within Stage-specific Construction Environmental Management Plans (CEMP) and detailed within Principal Contractor's Method Statements for each of the Stages that involve crossing water courses.

2 The cables will be fully ducted along the route and this will continue when crossing existing culverts. It may be required to install a new culvert across a watercourse instead of a bridge in which case a precast concrete or other appropriately designed pipe would typically be installed in the watercourse, and cable ducts and road installed on top.

2 Ducted Cable Installation

3 In order to reduce the footprint and length of time required for cable installation, it is proposed to install ducts and all associated civil works, prior to the installation of the cables. This will allow cables to be pulled through at a later date therefore minimising the time open excavated ground would be exposed to weather and generally make the works more efficient.

4 The cable trench excavation will be checked for line and level by the Principal Contractor's engineers/foreman. Once satisfied, the base of the cable trench will receive a layer of Cement Bound Sand (CBS) or subsoil. The use of CBS will be dependent upon the subsoil's thermal resistivity properties. This will be tested along the length of the cable route to assess suitability as part of the ground investigation. It is envisaged that the requirements for CBS will vary along the length of the cable route.

5 Two ducts and a small fibre optic duct for the High Voltage Direct Current (HVDC) cables, and six ducts (in two trefoil arrangements) and a small fibre optic cable for the High Voltage Alternating Current (HVAC) cables will be laid in each trench.

6 The cable ducts shall be delivered to site on a low loader with Hiab and will be distributed to the trench locations using a dumper. The ducts are typically supplied in 6/12 m lengths and are typically jointed using push-fit systems.

7 Once the ducts are in place, the trench will be backfilled with certified material such as CBS or subsoil (where soil properties permit). The backfill will be installed to a level around 100 mm above the crown of the duct. Once the backfill is levelled, protective cable tiles and warning marker tape shall be put in place.

8 The reinstatement of the cable trench above the marker tape (up to topsoil level) will utilise the subsoil that was previously excavated from the trench and notification marker to the boundary of the field to notify the position of the buried systems.

9 Excess subsoil spoil if not reused for landscaping on site (not topsoil) shall be removed from site in a tipper wagon to an appropriately certified disposal site. The material will be deposited in the wagon using an excavator.

10 In areas where existing land drainage pipes have had to be severed to accommodate the cable trenches, pre-construction drainage will be installed to capture any drainage run off prior to the works commencing.

Following duct installation any required post-construction drainage will be installed to ensure any existing pipework is made good in accordance with the land drainage specialist's design.

3 Cable Installation – Water Crossings

11 Where a trenchless method such as Horizontal Directional Drilling (HDD) is used for the cable to cross a waterway/ditch along the route, this will be done as per Appendix 4.7 of the CoCP.