

West Burton Solar Project

Technical Note on Horizontal Directional Drilling and Cabling under the River Trent

Prepared by: Lanpro Services
February 2024

PINS reference: EN010132
Document reference: EX4/WB8.2.8
Infrastructure Planning (Examination Procedure) Rules 2010



Contents

<u>1</u>	<u>INTRODUCTION</u>	<u>3</u>
<u>2</u>	<u>REVIEW OF DESCRIPTION AND ASSESSMENT OF ACTIVITIES</u>	<u>4</u>
2.1	MARINE MANAGEMENT ORGANISATION SUBMISSION	4
2.2	PARTICULARISATION OF ACTIVITIES	6
2.3	ASSESSMENTS OF POTENTIAL ACTIVITIES	7
2.4	CONTROL AND MONITORING MEASURES	8
<u>3</u>	<u>CONCLUSION</u>	<u>9</u>

Issue Sheet

Report Prepared for: West Burton Solar Project Ltd.
Examination Deadline 4

Technical Note on Horizontal Directional Drilling and Cabling under the River Trent

Prepared by:

Name: Aidan Van de Weyer

Title: Senior Planner

Approved by:

Name: Jane Crichton

Title: Associate Director

Revision	Date	Prepared by:	Approved by:
Original	28 Feb 2024	AV	JC

1 Introduction

- 1.1.1 This Technical Note has been prepared by West Burton Solar Project (the Applicant) in response to Sections 5 and 6 of the submission of the Marine Management Organisation (the MMO) to the West Burton Solar Project Examination dated 9th January 2024 [REP3-047]. The Applicant also committed to provide a signposting document in regards to the activities associated with the Deemed Marine License as an action from Issue Specific Hearing 2 as set out in **Written Summary of the Applicant's Oral Submissions at the Issue Specific Hearing (ISH2) [EN010132/EX4/WB8.1.24]** under Agenda item 6c.
- 1.1.2 This Technical Note provides a collation of where the construction activities associated with Horizontal Directional Drilling (HDD) and cabling under the River Trent have been assessed within the Environmental Statement (ES) [APP-038 to APP-061] and the proposed mitigation measures as they relate to the potentially licensable activities.
- 1.1.3 The objective of this Technical Note is to demonstrate that the Applicant has provided a suitably comprehensive and proportionate assessment of the licensable activities associated with the Scheme.

2 Review of description and assessment of activities

2.1 Marine Management Organisation Submission

2.1.1 As noted in Section 1, the MMO submitted a representation at Deadline 3 dated 9th January 2024 [REP3-047]. The text of Sections 5 and 6 is reproduced below.

5. *Licensable Activities and Procedure*
 - 5.1 *It is essential that all activities are properly detailed and full particularised in the DCO for the purposes of a DML.*
 - 5.2 *It appears to the MMO that the Applicant is primarily proposing to carry out an activity which falls within an exemption. However, the Applicant is also seeking a DML to address the hypothetical situation whereby they are unable to carry out the works as anticipated and it would become necessary to undertake different works to achieve the same end, but that those works may not fall within an exemption under the 2011 Order.*
 - 5.3 *It is the MMO's position that the Applicant has two options;*
 - a. *Have no deemed marine licence, and at such a time as it becomes necessary, if ever, for the Applicant to make an application for a marine licence to the MMO; or*
 - b. *Provide the necessary information and detail now to the MMO, which can be fully assessed and upon which the MMO can make a reasoned determination in accordance with s. 69 2009 Act, and which would withstand any challenge.*
 - 5.4 *As set out above in Section 2, the Nationally Significant Infrastructure Projects process only alters the mechanism by which a marine licence is granted, the process remains the same. If the Applicant was making an application for a marine licence, the MMO would require the Applicant to provide the information as set out below, without which the MMO would be unable to determine the application.*
 - 5.6 *In order to progress any deemed marine licence, the Applicant will need to provide the following information: -*
 - *Full details of any licensable activity in line with s.66 of the 2009 Act and at what stage these would take place - construction, operation (maintenance) and decommissioning;*
 - *Worst case scenario area and volume size of impacts for each activity; and*
 - *Full assessment of the worst-case scenario as part of the Environmental Impact Assessment so a holistic assessment can be made on the whole project.*
 - *Details which the applicant would need to provide to the ExA which have not yet been provided, include but are not limited to, a clearly*

defined programme of works which includes marine licensable activities which are not covered by an exemption. A programme of works should detail all methodology and include the maximum dimensions and equipment to be used. This should specifically relate to the named activity. There should also be an Environmental Impact Assessment (EIA), a Habitats Regulations Assessment (HRA), Marine Plan Policy Assessment (MPPA) and a Water Framework Directive (WFD) compliance assessment.

6. Deemed Marine Licence

6.1 As set out above, MMO request the DML is removed from the DCO.

6.2 *It has been difficult to assess whether or not the conditions the Applicant has included in the DML, which are under the headings of notifications, pollution prevention, post- construction, maintenance and decommissioning, are sufficient due to the lack of detail on the specific activities.*

6.3 *Conditions in a marine licence regulate the activities that are to be undertaken, and set out the methods by which those activities are carried out, exerting the necessary controls in order to protect the environment, human health and to prevent interference with legitimate uses of the sea, along with any other matters as the MMO thinks relevant.*

6.4 *In the absence of sufficient detail, or the appropriate assessments from the Applicant, the MMO is unable to determine whether the conditions proposed by the Applicant in the DML are appropriate in the circumstances.*

6.5 *However, should the Secretary of State be minded to include the DML, which we strongly advise against, without prejudice comments on the draft DML have been provided in Table 1 below, noting that if further information is provided this would require review and update.*

6.6 *The MMO also notes that some conditions relation to the environmental statement and other documents of which the information on the activities is not clear.*

6.7 *The MMO utilises Paragraph 55 of the National Planning Policy Framework which makes clear that planning conditions should be kept to a minimum, and only used where they satisfy the following tests:*

- *necessary;*
- *relevant to planning;*
- *relevant to the development to be permitted;*
- *enforceable; and*

- *precise.*

The Applicant has highlighted in bold in Section 2.1 the points which will be addressed in this document.

2.2 Particularisation of activities

2.2.1 The **Draft Development Consent Order Revision E [EN010132/EX4/WB3.1_E]** (dDCO) and documents referred to within it describe the activities relating to the installation of the electrical cabling.

2.2.2 Schedule 14 of the dDCO lists the documents and plans to be certified. These include the **Works Plan Revision D [EN010132/EX4/WB2.3_D]**, **Concept Design Parameters and Principles Revision C [EN010132/EX4/WB7.13_C]** and the **Outline Construction Environmental Management Plan Revision C [EN010132/EX4/WB7.1_C]**.

2.2.3 Part 1 of Schedule 9 of the dDCO describes the licenced activities that would fall within the scope of the proposed Deemed Marine Licence.

2.2.4 The **Works Plan Revision D [EN010132/EX4/WB2.3_D]** shows the geographic extent of Work. No. 5A and Work No. 5B, which are works in connection with electrical cabling.

2.2.5 The **Concept Design Parameters and Principles Revision C [EN010132/EX4/WB7.13_C]** sets out the design parameters and principles for the relevant activities.

2.2.6 For Scheme Component 'High voltage electrical cables connecting Work No.3C to Work No.4' and for 'High voltage electrical cables connecting Work Nos. 3A and, 3B to Work No.3C'. the scale includes the following relevant parameters:

Where set in horizontal directional drilling sections, the 3no. cables making up a single electrical cable circuit will be drilled through individual bores separated by approximately 3.0m set within the 50m cable corridor.

Where set in horizontal directional drilling sections, the maximum bore of a single drilled cable tunnel is 1.0m.

Where multiple circuits are directional drilled along parallel paths, the minimum separation distances between drilled cable circuits is 5.0m.

Where set in horizontal directional drilling sections, the maximum depth of the drilled cable tunnel is 25m below ground level.

2.2.7 For Scheme Component 'Tunnelling, boring and drilling works (Work No. 5A(vi) and Work No. 5B(iv))', the scale is described as follows:

Maximum dimensions of 25m by 25m in plan, with onsite equipment and structures being of a maximum of 6m in height.

The HDD depth will be a maximum of 25m below the bottom of the river bed and a minimum of 5m below the lowest surveyed point of the River Trent riverbed in order to prevent risk of any scour exposing cable.

2.2.8 It is to be noted that the minimum and maximum depth of boring under the River Trent was included to address comments from the Canal and River Trust at Deadline 1 and Deadline 3.

2.3 Assessments of potential activities

2.3.1 The Applicant has set out their approach to the environmental assessment in the Environmental Statement **Chapter 4: Scheme Description [APP-042]**. National Policy Statement EN-1 (November 2023) recognises that it may not be possible at the time of application for development consent for all aspects of the proposal to have been settled in precise detail (paragraph 4.3.11). To accommodate flexibility, a 'Rochdale Envelope' approach is used, as described in the Planning Inspectorate Advice Note 9. This involves assessing the maximum (and where relevant, the minimum) parameters for the Scheme where flexibility needs to be retained, while ensuring all potentially significant effects (positive or adverse) are considered. The principles and justification for this approach are set out in ES **Chapter 2: EIA Process and Methodology [APP-040]**.

2.3.2 The maximum design scenarios are identified from the range of potential options for each design parameter for the Scheme. The maximum design scenario assessed is therefore the scenario which would give rise to the greatest potential impact. The maximum design scenarios are set out in the **Concept Design Parameters and Principles [EN010132/EX4/WB7.13_C]** which is secured by Requirement 5 of Schedule 2 the **draft DCO Revision E [EN010132/EX4/WB3.1_E]**. All of the ES chapters have based their assessments on these maximum design parameters **[APP-038 to APP-061]**.

2.3.3 **Chapter 10 Hydrology, Flood Risk and Drainage [APP-048]** considers the potential for issues arising during construction or operation. Paragraph 10.4.2 sets out that the hydrological assessment considers surface water quality risk assessment and pollution control review. The chapter also considers the Water Framework Directive, along with the **Water Framework Directive Revision A [REP1-040]**.

2.3.4 The **Water Framework Directive Revision A [REP1-040]** considers the main potential significant effects to the WFD waterbodies at the Scheme and managing surface water risk at the Scheme and the potential for silt laden runoff, spillages, leaks and pollutants during the construction/decommissioning stage and diffuse pollution contained in urban runoff during the operation phase from a water quality/resource perspective.

2.3.5 **Chapter 11 Ground Conditions and Contamination [APP-049]** evaluates the potential impact of the Scheme on sensitive receptors during its construction, operational, and decommissioning phases in relation to sensitive receptors (human health and controlled waters). Section 11.8 sets out the likely significant effects with

paragraphs 11.8.18 and 11.8.19 specifically assessing the cable route corridor which concludes there will be no significant effects with the embedded mitigation.

2.4 Control and Monitoring Measures

2.4.1 Chapter 10 Hydrology, Flood Risk and Drainage [APP-048], Chapter 11 Ground Conditions and Contamination [APP-049] and Water Framework Directive Revision A [REP1-040] set out the embedded mitigation which is secured and controlled through the submission and approval of a detailed construction environmental management plan that is substantially in accordance with the Outline Construction Environmental Management Plan Revision C [EN010132/EX4/WB7.1_C]. This is secured by Requirement 13 of Schedule 2 of the Draft Development Consent Order Revision E [EN010132/EX4/WB3.1_E]. This requirement applies both to exempt activities and licenced marine activities within the scope of the Deemed Marine Licence.

2.4.2 Table 3.11 of the Outline Construction Environmental Management Plan Revision C [EN010132/EX4/WB7.1_C] includes a requirement that:

An emergency spillage action plan will be produced, which staff would have read and understood, and provisions made to contain any leak/spill. The Plan will include measures to deal with a frack out (spill) as a result of horizontal Directional Drilling (HDD). Any frack out would be assessed individually to determine the correct course of action. In general the procedure is:

- o Stop drilling sand bag and bund;*
- o Dig out and suck out via a gully sucker tanker lorry;*
- o Inject additive through drill rods;*
- o Closely monitor.*

2.4.3 Table 3.4 of the Outline Construction Environmental Management Plan Revision C [EN010132/EX4/WB7.1_C] includes a requirement that:

Construction works undertaken adjacent to watercourses would comply with relevant guidance during construction, including on Horizontal Directional Drilling (HDD). Where HDD techniques are required for watercourse crossings, works will be in accordance with Concept Design Parameters and Principles document [EN010132/EX4/WB7.13_C].

2.4.4 For licenced marine activities within the scope of the Deemed Marine Licence, Part 2 of Schedule 9 of the Draft Development Consent Order Revision E [EN010132/EX4/WB3.1_E] describes the conditions of the Deemed Marine Licence, including the obligations of the Applicant. This includes requirements for notifying the MMO, for consulting the MMO and for obtaining written approval of the MMO.

3 Conclusion

- 3.1.1 This document has been produced for the examination of this Scheme as part of discussions under Issue Specific Hearing 2 as set out in **Written Summary of the Applicant's Oral Submissions at the Issue Specific Hearing (ISH2) [EN010132/EX4/WB8.1.24]** under Agenda item 6c, to provide a collation of where the construction activities associated with Horizontal Directional Drilling (HDD) and cabling under the River Trent have been assessed within the Environmental Statement (ES) **[APP-038 to APP-061]** and the proposed mitigation measures as they relate to the except and potentially licensable activities.
- 3.1.2 Mitigation measures are set out in the **Outline Construction Environmental Management Plan Revision C [EN010132/EX4/WB7.1_C]** which is secured Requirement 13 of Schedule 2 of the **Draft Development Consent Order Revision E [EN010132/EX4/WB3.1_E]**.
- 3.1.3 There are clear benefits in including the DML in terms of certainty and programme for the Scheme and it would not be in the public interest to postpone the decision on the grant of a DML to a later stage of the Scheme. This Technical Note has demonstrated the Applicant has provided a suitably comprehensive and proportionate assessment of the licensable activities associated with the Scheme.