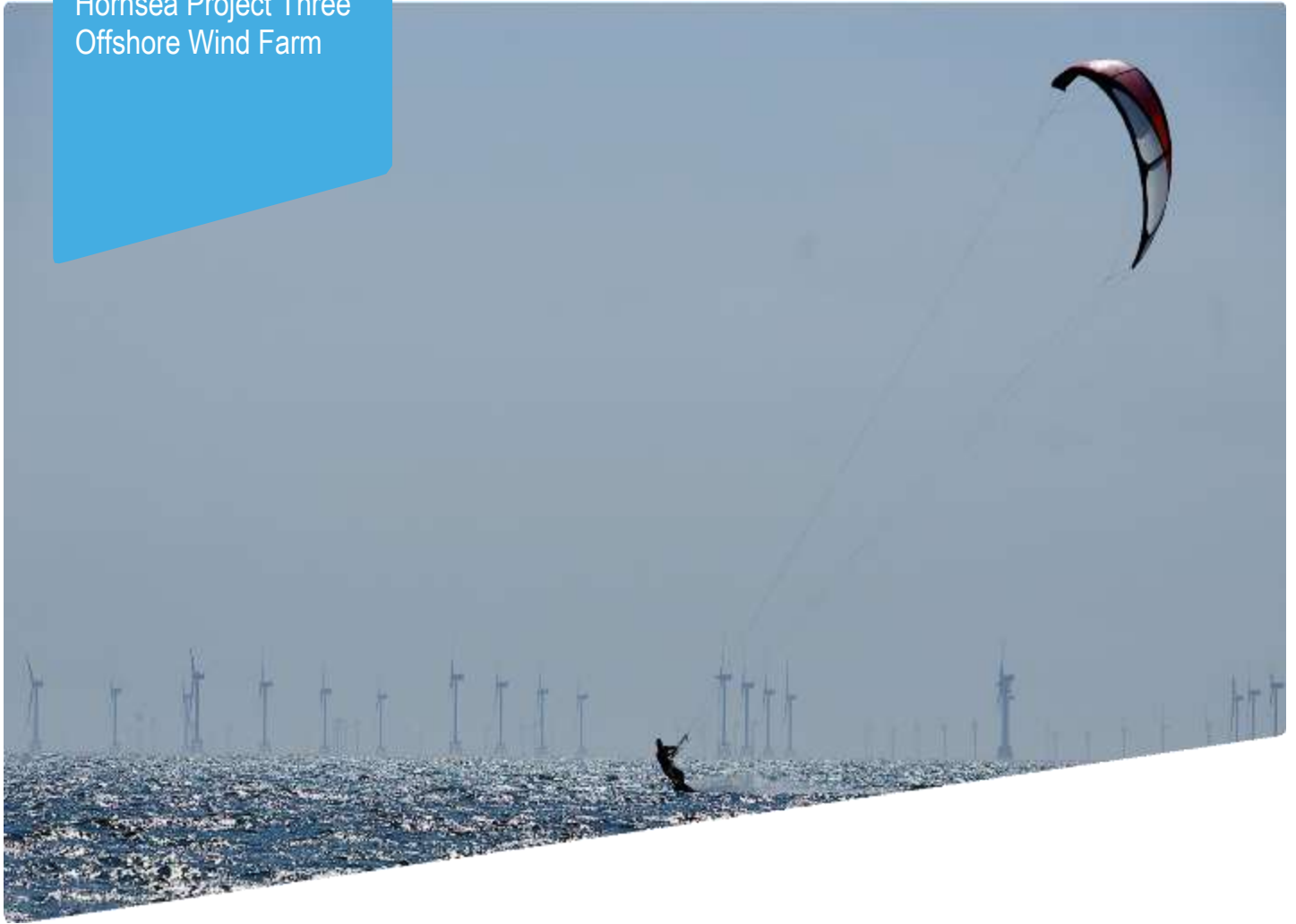


Hornsea Project Three
Offshore Wind Farm



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Appendix 38 to Deadline I Submission – Important Hedgerows

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1. Introduction

1.1 This Appendix summaries the criteria for hedgerows to be classified as ‘important’ under the Hedgerow Regulations and includes a plan of all important hedgerows within the Hornsea Three order limits (Figure 1) and hedgerows identified as important for historic reasons (Figure 2).

Important Hedgerow Classification

1.2 To qualify as important, a hedgerow must be at least 30 years old and meet at least one of the eight criteria listed in Part II Schedule 1 of the Regulations.

1.3 These criteria are summarised below.

- Criteria 1: The hedgerow marks all or part of a parish or township boundary that existed before 1850;
- Criteria 2: The hedgerow contains an archaeological feature such as a scheduled monument;
- Criteria 3: The hedgerow is found within or partially within or adjacent to an archaeological site listed on a Historic Environment Record or is associated with any monument or feature on that site;
- Criteria 4: The hedgerow marks the boundary of a pre-1600 AD estate or manor or is visibly related to any building or other feature of such an estate or manor;
- Criteria 5: The hedgerow is part of a field system or is related to any building or features associated with a field system that existed before the Inclosure Acts.
- Criteria 6: The hedgerow contains those species:
 - Found under schedule 1, 5 or 8 of the Wildlife and Countryside Act 1981; or
 - That are considered endangered, vulnerable or rare under the British Red Data books.
- Criteria 7: An important hedgerow is one that:
 - Marks a pre-1850 parish or township boundary;
 - Incorporates an archaeological feature;
 - Is part of, or associated with, an archaeological site or monument;
 - Marks the boundary of, or is associated with, a pre-1600 estate or manor;
 - Forms an integral part of a pre-Parliamentary enclosure field system;
 - Contains certain categories of species of birds, animals or plants listed in the Wildlife and Countryside Act or Joint Nature Conservation Committee (JNCC) publications; or
 - Includes, on average, in a 30 m length –
 - At least seven woody species;
 - At least six woody species with at least three associated features;
 - At least six woody species including black-poplar tree (*Populus nigra*), large-leaved lime (*Tilia platyphyllos*), small-leaved lime (*Tilia cordata*), or wild service tree (*Sorbus torminalis*); or
 - At least five woody species and has associated with it at least four associated features.

- Criteria 8: Runs alongside a bridleway, footpath, road used as public path or a byway open to all traffic, or includes at least four woody species, on average, in a 30 m length, and has at least two associated features.
 - The associated features are:
 - A bank or wall supporting the hedgerow for at least half its length;
 - Less than 10% gaps;
 - At least one tree per 50 m of hedge;
 - At least three herbaceous woodland plants are present within 1 m of the hedge;
 - A ditch along at least half of the length of the hedge;
 - A number of connections with other hedgerows, ponds, or woodland; and
 - A parallel hedge within 15 m of the hedgerow.

2. Desktop study methodology

2.1 The Applicant has had regard to all importance criteria listed in the Hedgerow Regulations (1997), as demonstrated in **Table 2.1**. Sufficient field surveys were undertaken to inform the hedgerow data included in the Environmental Statement. In combination with the further desktop analysis listed in Table 2.1, this is considered sufficient to identify and characterise important hedgerows.

Table 2.1: Desktop study with regard to hedgerow importance criteria

Criteria	Desktop Study
Archaeology and History (Criteria 1-5)	<p>In response to the Examining Authority’s Question 1.8.13, Figure 2 to this Appendix shows all hedgerows which are classified as important due to archaeology and history criteria.</p> <p>All the hedgerows identified as important for historic reasons mark a pre-1850 parish boundary. The historic parish boundaries shapefile was sourced from the UK Data Service in 2018 and is the result of a study carried out by the University of Portsmouth Department of Geography (Burton and Southall, 2004).</p> <p>No hedgerows were found to be important through the other archaeology and history criteria. A MAGIC search and review of the tithe maps was carried out to verify this.</p>
Wildlife and Landscape (Criteria 6-8)	<p>Figure 1 to this Appendix shows all hedgerows classified as important.</p> <p>Volume 6, Annex 3.8: Hedgerow Survey of the Environmental Statement [APP-130] is the result of an ecological ground survey of all species-rich hedgerows (JNCC, 1993) identified during the Phase 1 Habitat Survey (Volume 6, Annex 3.1 of the Environmental Statement [APP-129]) within the PEIR onshore cable corridor search area and likely to be affected by Hornsea Three, using the methods detailed in the Hedgerow Survey Handbook (Defra, 2007, 2nd ed.).</p> <p>A desktop review of the protected species surveys carried out as part of the Environmental Statement found one hedgerow to contain a soprano pipistrelle roost (Figure 7.39 of Volume 6, Annex 3.8: Bat Surveys of the Environmental Statement [APP-136]), and is therefore classified as important.</p> <p>A desktop study of the landscape importance criteria was carried out in 2018 using OS maps.</p> <p>This data was used to assess each hedgerow against the wildlife and landscape criteria for determining important hedgerows.</p>

3. Results

3.1 Within the Hornsea Three Order Limits, a total length of 5,346 m of hedgerow was identified as important. Of this, 2,721 m (approximately 50 %) will be crossed by Horizontal Directional Drilling (HDD), either by HDD only or HDD with a haul road going over the crossing. A further 1,849 m is on the boundary of the Order Limits, and therefore is likely to be retained. As described in the Outline Code of Construction Practice [Paragraph 6.5.1.14, APP-179], the length of individual hedgerow sections to be removed will be reduced as far as reasonably practicable, and where an HDD with a haul road, or HDD with ducting laydown is proposed, the exact location of the haul road/ducting laydown within the Order Limits would be optimised through agreement with a suitably qualified ecologist to further minimise hedgerow and tree removal. Figure 1 shows the locations of the important hedgerows.

Table 3.1: Important hedgerows within the Hornsea Three Order Limits

Status	Length
Total length of important hedgerow within the Order Limits	5,346 m
Length of important hedgerow which will be HDD only	1,404 m
Length of important hedgerow which will be HDD with a haul road (haul road location will be agreed with an ecologist, see paragraph 3.1)	1,317 m
Length of important hedgerow which will be HDD with ducting laydown	0 m
Length of important hedgerow which will be either HDD with haul road over or open cut	0 m
Length of hedgerow not within an HDD area	2,625 m (of which 1,849 m runs alongside the boundary and therefore will be retained where practicable)

4. Appendix A - References

- A.1 Defra (2007) Hedgerow Survey Handbook: A standard procedure for local surveys in the UK. London, Defra.
- A.2 Her Majesty's Stationery Office (HMSO) (2017) The Hedgerows Regulations 1997. Available online: <http://www.legislation.gov.uk/ukxi/1997/1160/contents/made> [Accessed on 07 August 2018]
- A.3 JNCC (1993) Handbook for Phase 1 habitat survey: A technique for environmental audit. Joint Nature Conservancy Committee, Peterborough.

5. Appendix B – Figures

Figure 1: Important Hedgerows

Figure 2: Historic Hedge