



Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects

Supporting Documents for the Applicant's Responses to
the Examining Authority's Fourth Written Questions

Revision A

Deadline 7

July 2023

Document Reference: 21.5.1



Title:	
Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects Examination submission Supporting Documents for the Applicant's Responses to the Examining Authority's Fourth Written Questions	
PINS document no.: 21.5.1	
Document no.: C282-RH-Z-GA-00315	
Date:	Classification
July 2023	Final
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Appendix A.1

*This appendix has been produced to support the Applicant's response to the Examining Authority's Fourth Written Questions – Q4.6.1. This document should be read alongside **The Applicant's Responses to the Examining Authority's Fourth Written Questions** [document reference 21.5]*

Appendix A.1 Development Scenarios: Vehicle Numbers Comparison

Table 1: Comparison between Light Vehicle (LV) numbers of SEP or DEP in Isolation (Scenario 1a or 1b) vs. SEP and DEP Concurrently (Scenario 1d)

Activity	SEP or DEP in isolation (Scenario 1a or 1b) <i>Numbers summarised from Annex 9 of the Transport Assessment [APP-269]</i>			SEP and DEP concurrently (Scenario 1d) <i>Numbers summarised from Annex 10 of the Transport Assessment [APP-269]</i>			Notes
	Total Light Vehicle (LVs) per activity	Total number of work days per activity *	Daily LVs per work day, per activity	Total Light Vehicle (LVs) per activity	Total number of work days per activity *	Daily LVs per work day, per activity	
Mobilisation of compounds	3,800	380	10	3,810	381	10	There is no discernible difference between the numbers for the construction of SEP or DEP in Isolation and SEP and DEP concurrently. This reflects these activities being provided with shared works in a concurrent scenario (Scenario 1d).
Accesses	6,435	715	9	6,372	708	9	
Right of Way <i>(includes fencing and ditch flumes)</i>	6,188	476	13	5,889	453	13	
Drainage	3,998	476	8	3,788	451	8	
Topsoil	5,269	479	11	4,994	454	11	
Haul Road	8,073	897	9	8,181	909	9	
Crossings <i>(undertaking HDDs)</i>	7,608	634	12	14,940	1,245	12	
Ducting	5,736	239	24	11,472	478	24	
Joint Bays	2,169	241	9	4,320	480	9	
Cable	2,160	240	9	4,320	480	9	
Jointing	2,868	478	6	5,784	964	6	
Landfall	2,754	153	18	7,578	421	18	
Substation <i>(above ground Infrastructure works)</i>	26,175	400	65	52,350	400	131	
Substation <i>(site preparation)</i>	6,440	644	10	7,380	738	10	The total number of LV movements for the construction of SEP and DEP concurrently

	SEP or DEP in isolation (Scenario 1a or 1b) <i>Numbers summarised from Annex 9 of the Transport Assessment [APP-269]</i>			SEP and DEP concurrently (Scenario 1d) <i>Numbers summarised from Annex 10 of the Transport Assessment [APP-269]</i>			Notes
Activity	Total Light Vehicle (LVs) per activity	Total number of work days per activity *	Daily LVs per work day, per activity	Total Light Vehicle (LVs) per activity	Total number of work days per activity *	Daily LVs per work day, per activity	
<i>works)</i>							(Scenario 1d) are higher but not double. This reflects that some works would be shared between the onshore substations, such as haul roads and compounds. However, other works such as creating the platforms would be separate.
Total	89,673	6,452	n/a	14,1178 (44% higher)	8,562 (28% higher)	n/a	
Notes: <i>* Work days is a project planning term which relates to the total FTE days required to complete an activity.</i>							

Table 2: Comparison between Heavy Goods Vehicle (HGV) numbers of SEP or DEP in Isolation (Scenario 1a or 1b) vs. SEP and DEP Concurrently (Scenario 1d)

Activity	SEP or DEP in isolation (Scenario 1a or 1b) <i>Numbers summarised from Annex 9 of the Transport Assessment [APP-269]</i>			SEP and DEP concurrently (Scenario 1d) <i>Numbers summarised from Annex 10 of the Transport Assessment [APP-269]</i>			Notes
	Total HGVs per activity	Total number of work days per activity *	Daily HGVs per work day, per activity	Total HGV per activity	Total number of work days per activity *	Daily HGVs per work day, per activity	
Mobilisation of compounds	4,515	380	11.9	5,100	381	13.4	Compounds are to be provided as shared works in a concurrent scenario (Scenario 1d). However, the total number of HGV movements for the construction of SEP and DEP concurrently are marginally higher than for the construction of SEP or DEP in isolation. This reflects that the main compound would be bigger for Scenario 1d to accommodate two projects.
Accesses	1,696	715	2.4	1,696	708	2.4	There is no discernible difference between the numbers for the construction of SEP or DEP in Isolation and SEP and DEP concurrently. This reflects these activities being provided with shared works in a concurrent scenario (Scenario 1d).
Right of Way <i>(includes fencing and ditch flumes)</i>	897	476	1.9	897	476	1.9	
Drainage	3,319	476	7.0	3,319	451	7.4	
Topsoil	144	479	0.3	144	479	0.3	
Jointing	504	478	1.1	504	964	0.5	
Haul Road	24,441	897	27.2	24,441	909	26.9	The total number of HGV movements per activity for the construction of SEP and DEP concurrently are higher than for the construction of SEP or DEP in isolation. This reflects that these activities would not be provided as shared works in a concurrent
Crossings <i>(undertaking HDDs)</i>	3,210	634	5.1	5,400	1,245	4.3	
Ducting	4,073	239	17.0	7,900	478	16.5	
Joint Bays	652	241	2.7	687	480	1.4	
Cable	504	240	2.1	840	480	1.8	

	SEP or DEP in isolation (Scenario 1a or 1b) <i>Numbers summarised from Annex 9 of the Transport Assessment [APP-269]</i>			SEP and DEP concurrently (Scenario 1d) <i>Numbers summarised from Annex 10 of the Transport Assessment [APP-269]</i>			Notes
Activity	Total HGVs per activity	Total number of work days per activity *	Daily HGVs per work day, per activity	Total HGV per activity	Total number of work days per activity *	Daily HGVs per work day, per activity	
Landfall	398	153	2.6	591	421	1.4	scenario (Scenario 1d).
Substation <i>(site preparation works)</i>	7,122	644	11.1	9,872	738	13.4	
Substation <i>(above ground Infrastructure)</i>	16,875	400	42.2	33,750	400	84.4	
Total	68,350	6,452	n/a	95,145 (33% higher)	8,610 (29% higher)	n/a	
Notes: <i>* Work days is a project planning term which relates to the total FTE days required to complete an activity.</i>							

Appendix A.2

*This appendix has been produced to support the Applicant's response to the Examining Authority's Fourth Written Questions – Q4.14. This document should be read alongside **The Applicant's Responses to the Examining Authority's Fourth Written Questions** [document reference 21.5]*

Title:	
Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects Examination submission	
A.2 Joint Natural England and Applicant Position on HRA Conclusions and Derogation Requirements	
PINS document no.: 21.5.1	
Document no.: C282-RH-Z-GA-00315	
Date:	Classification
July 2023	Final
Prepared by:	
Royal HaskoningDHV and Natural England	
Approved by:	Date:
Tom Morris, Equinor	July 2023

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Glossary of Acronyms

AEoI	Adverse Effect on Integrity
DEL	Dudgeon Extension Limited
DEP	Dudgeon Offshore Wind Farm Extension Project
LSE	Likely Significant Effect
RIAA	Report to Inform Appropriate Assessment
SAC	Special Area of Conservation
SEL	Scira Extension Limited
SEP	Sheringham Offshore Wind Farm Extension Project
SPA	Special Protection Area

Glossary of Terms

Dudgeon Offshore Wind Farm Extension Project (DEP)	The Dudgeon Offshore Wind Farm Extension onshore and offshore sites including all onshore and offshore infrastructure.
European site	Sites designated for nature conservation under the Habitats Directive and Birds Directive. This includes candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation, potential Special Protection Areas, Special Protection Areas, Ramsar sites, proposed Ramsar sites and sites compensating for damage to a European site and is defined in regulation 8 of the Conservation of Habitats and Species Regulations 2017, although some of the sites listed here are afforded equivalent policy protection under the National Planning Policy Framework (2021) (paragraph 176) and joint Defra/Welsh Government/Natural England/NRW Guidance (February 2021).
Sheringham Shoal Offshore Wind Farm Extension Project (SEP)	The Sheringham Shoal Offshore Wind Farm Extension onshore and offshore sites including all onshore and offshore infrastructure.
The Applicant	Equinor New Energy Limited. As the owners of SEP and DEP, Scira Extension Limited and Dudgeon Extension Limited are the named undertakers that have the benefit of the DCO. References in this document to obligations on, or commitments by, 'the Applicant' are given on behalf of SEL and DEL as the undertakers of SEP and DEP.

1 Introduction

1. This document provides a joint response from the Applicant and Natural England to the following second written question Q2.14.1.1 [PD-012]. The first version of this document was submitted at Deadline 3 within Appendix B.2 of **Appendix B - Supporting documents to the Applicant's Responses to the Examining Authority's Second Written Questions** and has been updated at Deadline 7 to reflect the current positions of each party and in response to fourth written question Q4.14.1.1 [PD-021]. There remain a number of outstanding matters as described within each receptor group section which the Applicant and Natural England are seeking to resolve and therefore a further update to this document will be provided at Deadline 8.

WQ2.14.1.1:

[Adverse Effect on Integrity] AEoI Conclusions

The Applicant assessed a number of designated sites and features within their HRA screening and assessment processes [APP-059] on a project alone and in-combination basis. The Applicant concluded that the project, alone, would not have an AEoI on any feature of any designated site. The Applicant concluded that for the project, in combination with other plans and projects, an AEoI could be ruled out on all features of all designated sites except for sandwich tern and kittiwake.

The ExA require confirmation that this is a common and shared position with NE. Applicant and NE submit a jointly produced table (see Annex A), listing all relevant sites and all features from the [Habitats Regulations Assessment] HRA process [APP-059] and submit it to the Examination either as a standalone document or as an appendix to the SoCG. Refer to the extract from the East Anglia One North Recommendation Report and provide similar colour coding.

2. This document provides the Applicant's and Natural England's joint position in relation to conclusions of AEoI and the requirement for HRA derogation and compensation in relation to:
 - Offshore Special Protection Areas (SPA) (including Ramsar Sites with migratory waterbird features at potential risk of collision on passage) (**Section 2**);
 - Offshore Annex I habitats (**Section 3**);
 - Marine mammal Special Areas of Conservation (SAC) (**Section 4**); and
 - Onshore National Site Network Sites (**Section 4**).

2 Offshore Special Protection Areas (including Ramsar Sites with Migratory Waterbird Features at Potential Risk of Collision on Passage)

3. **Table 1** provides the Applicant's and Natural England's joint position in relation to conclusions of AEoI and the requirement for HRA derogation and compensation for offshore SPAs (including Ramsar Sites with migratory waterbird features at potential

risk of collision on passage). The assessments on which these conclusions are based are provided within the **Report to Inform Appropriate Assessment (RIAA)** [APP-059] with updates to the assessments for some sites and species presented in the **Apportioning and Habitats Regulations Assessment (HRA) Updates Technical Note (Revision D)** [document reference 13.3].

4. As per the final row of **Table 1**, the Applicant and Natural England are agreed that all other SPAs not described within **Table 1**, and potential pathways of effect, have been screened out of assessment.
5. With respect to the red-throated diver feature of the Greater Wash SPA and Outer Thames Estuary SPA, the Applicant has provided an updated assessment and has committed to a number of mitigation measures as described in the **Apportioning and Habitats Regulations Assessment (HRA) Updates Technical Note (Revision D)** [document reference 13.3]. The Applicant and Natural England are seeking to agree the updated assessment and mitigation commitments to allow Natural England to conclude that an adverse effect on both SPAs can be ruled out before the close of Examination.

Table 1 Joint Applicant and Natural England position in relation to conclusions of AEoI for offshore SPAs (including Ramsar Sites with migratory waterbird features at potential risk of collision on passage)

European Sites and Qualifying Feature(s)	Likely Significant Effect (LSE) Identified from...	AEoI Alone Excluded	AEoI In-combination Excluded	HRA Derogations Engaged	Compensation Required
Greater Wash SPA					
Breeding Sandwich tern	Collision risk	Yes	No	Yes	Yes
Breeding common tern	Collision risk	Yes	Yes	No	No
Nonbreeding little gull	Collision risk	Yes	Yes	No	No
Nonbreeding red-throated diver	Construction phase displacement / barrier effects	Yes	Applicant: Yes Natural England: TBC HOLD	TBC – Applicant has submitted further assessment and mitigation commitments within the Apportioning and HRA Updates Technical Note (Revision D) [document reference 13.3].	
	Operational phase displacement / barrier effects	Yes	Applicant: Yes Natural England: TBC HOLD		
	Operational phase displacement / barrier effects	Yes	Applicant: Yes		

European Sites and Qualifying Feature(s)	Likely Significant Effect (LSE) Identified from...	AEol Alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
	due to operation and maintenance vessel activity		Natural England: TBC HOLD		
North Norfolk Coast SPA (see Table 4-1 for conclusions of onshore assessments on this SPA)					
Breeding Sandwich tern	Collision risk	Yes	No	Yes	Yes
Breeding common tern	Collision risk	Yes	Yes	No	No
All qualifying migratory waterfowl (nonbreeding): dark-bellied Brent goose, pink-footed goose, knot, wigeon and wildfowl assemblage.	Collision risk	Yes	Yes	No	No
Alde-Ore Estuary SPA					
Breeding lesser black-backed gull	Collision risk	Yes	Yes	No	No
Flamborough and Filey Coast SPA					
Breeding gannet	Collision risk	Yes	Anticipated yes	No	No
Breeding kittiwake	Collision risk	Yes	No	Yes	Yes
Nonbreeding guillemot	Operational phase displacement / barrier effects	Yes	Applicant: Yes	Yes, on a without prejudice basis	Applicant: No
			Natural England: No		Natural England: Yes
Nonbreeding razorbill	Operational phase displacement / barrier effects	Yes	Applicant: Yes	Yes, on a without prejudice basis	Applicant: No
			Natural England: No		Natural England: Yes
Seabird assemblage	Effects on abundance, diversity and supporting habitats due to collision risk (operation and maintenance) and disturbance	Yes	Applicant: Yes	N/A – where individual species compensatory measures are agreed to be appropriate, further compensation will not be needed for assemblage.	
			Natural England: No		

European Sites and Qualifying Feature(s)	Likely Significant Effect (LSE) Identified from...	AEol Alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
	/ displacement (construction and operation and maintenance)				
Puffin (as a component of the seabird assemblage)	Operational phase displacement / barrier effects	Yes	Yes	No	No
Outer Thames Estuary SPA					
Nonbreeding red-throated diver	Operational phase displacement / barrier effects due to operation and maintenance vessel activity	Yes	Applicant: Yes	TBC – Applicant has submitted further assessment and mitigation commitments within the Apportioning and HRA Updates Technical Note (Revision D) [document reference 13.3].	
			Natural England: HOLD TBC		
All other Offshore SPAs (including Ramsar Sites with Migratory Waterbird Features at Potential Risk of Collision on Passage) screened into the RIAA [APP-059]					
N/A	N/A	Yes	Yes	No	No

3 Offshore Annex I SAC Habitats

6. **Table 2** provides the Applicant's and Natural England's joint position in relation to conclusions of AEol and the requirement for HRA derogation and compensation for offshore Annex I habitats. The assessments on which these conclusions are based are provided within the **Report to Inform Appropriate Assessment (RIAA)** [APP-059].
7. The Applicant and Natural England are agreed that all other SACs with Annex I habitats as qualifying features, and potential pathways of effect, have been screened out of assessment.

Table 2 Joint Applicant and Natural England position in relation to conclusions of AEol for offshore Annex I habitats

European Sites and Qualifying Feature(s)	LSE Identified from	AEol alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
The Wash and North Norfolk Coast SAC					
Sandbanks which are slightly covered by sea water all the time	Changes to tidal currents affecting sediment transport	Yes	Yes	No	No
Inner Dowsing, Race Bank and North Ridge SAC					
Sandbanks which are slightly covered by sea water all the time	Increased Suspended Sediment Concentration (SSC) and deposition	Yes	Yes	No	No
	Changes in physical processes (effecting	Yes (no impact) ¹	Yes (no impact) ²	No	No

¹ As described in Section 7.4.1 of the RIAA [APP-059]: *The closure depth is inshore of the HDD exit point, therefore where the net direction of sediment transport is wave driven and to the west there is no cable protection and therefore there will be no interruption to sediment supply inshore to the sandbank features of the Wash and Norfolk Coast SAC. Further offshore of the HDD exit point where there may be cable protection, the net sediment transport is tidally driven and to the south-east, and is travelling away from the Wash and North Norfolk Coast SAC. Consequently, there will be no interruption of sediment supply to the Annex I sandbanks of the Wash and North Norfolk Coast SAC, which will be supplied by sediment further up the coast from the north west.*

² Since there will be no impact to the subtidal sandbanks of the Wash and North Norfolk Coast SAC from potential changes to physical processes from the project-alone, there is no impact pathway for in-combination effects with other plans and projects

European Sites and Qualifying Feature(s)	LSE Identified from	AEoI alone Excluded	AEoI In-combination Excluded	HRA Derogations Engaged	Compensation Required
	sediment supply)				

4 Marine Mammal SACs

8. **Table 4-1** provides the Applicant's and Natural England's joint position in relation to conclusions of AEoI and the requirement for HRA derogation and compensation for marine mammal SACs. The assessments on which these conclusions are based are provided within the **RIAA** [APP-059] and **Marine Mammals Technical Note and Addendum (Revision B)** [document reference REP3-115].
9. Project-alone and in-combination effects have been given their own rows for clarity since the impact titles within the **RIAA** [APP-059] and **Marine Mammals Technical Note and Addendum (Revision B)** [document reference REP3-115] are not identical between these assessments. Therefore, where a row is in relation to project-alone effects, the in-combination column is marked as 'N/A' and vice versa.
10. The SACs and their qualifying features which have been assessed in the **RIAA** [APP-059] and the **Marine Mammals Technical Note and Addendum (Revision B)** [document reference 16.6] are included in **Table 4-1**.
11. The Applicant and Natural England are agreed that all other marine mammal SACs, and potential pathways of effect, have been screened out of assessment.
12. It is noted that a number of conclusions with respect to bottlenose dolphin, grey seal and harbour seal are to be confirmed pending additional information from the Applicant. The Applicant has sought to provide this within the **Marine Mammals Technical Note and Addendum (Revision B)** [document reference 16.14]. Natural England will provide an updated position once the document has been reviewed.

Table 3: Joint Applicant and Natural England position in relation to conclusions of AEoI for Marine Mammal SACs

European Sites and Qualifying Feature(s)	LSE Identified from	AEoI alone Excluded	AEoI In-combination Excluded	HRA Derogations Engaged	Compensation Required
Southern North Sea SAC					
<i>Construction - Project Alone</i>					
Harbour porpoise	Potential effects of underwater noise during piling	Yes	N/A	No	No
	Potential effects of underwater noise during other construction activities	Yes	N/A	No	No
	Potential effects of underwater noise and disturbance from construction vessels	Yes	N/A	No	No
	Potential barrier effects from underwater noise	Yes	N/A	No	No
	Potential effects of any increased collision risk with construction vessels	Yes	N/A	No	No
	Potential effects of any changes to water quality	Yes	N/A	No	No
	Potential effects of any changes in prey availability	Yes	N/A	No	No

European Sites and Qualifying Feature(s)	LSE Identified from	AEol alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
	Potential overall effects during construction	Yes	N/A	No	No
<i>Operation and maintenance (O&M) - Project Alone</i>					
Harbour porpoise	Potential effects of underwater noise from operational turbines	Yes	N/A	No	No
	Potential effects of underwater noise during O&M activities	Yes	N/A	No	No
	Potential effects of underwater noise and disturbance from O&M vessels	Yes	N/A	No	No
	Potential effects from underwater noise during O&M	Yes	N/A	No	No
	Potential effects of any increased collision risk with O&M vessels	Yes	N/A	No	No
	Potential effects of any changes to water quality during O&M	Yes	N/A	No	No
	Potential effects of any changes in prey availability during O&M	Yes	N/A	No	No

European Sites and Qualifying Feature(s)	LSE Identified from	AEol alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
	Potential overall effects during O&M	Yes	N/A	No	No
<i>In-combination</i>					
Harbour porpoise	Potential in-combination disturbance effects due to underwater noise from piling at other offshore wind farms (OWF)	N/A	Applicant: Yes Natural England: Outstanding concerns due to effectiveness of the SIP process in the post-consent phase		
	Potential in-combination disturbance effects due to underwater noise sources, other than piling	N/A	Applicant: Yes Natural England: Outstanding concerns due to effectiveness of the SIP process in the post-consent phase		
	Overall in-combination disturbance effects from all noise sources	N/A	Applicant: Yes Natural England: Outstanding concerns due to effectiveness of the SIP process in the post-consent phase		
Moray Firth SAC					
<i>Construction - Project Alone</i>					
Bottlenose dolphin	Potential effects of underwater noise during piling	Yes	N/A	No	No
	Potential effects of underwater noise during	Yes	N/A	No	No

European Sites and Qualifying Feature(s)	LSE Identified from	AEol alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
	other construction activities				
	Potential effects of underwater noise and disturbance from construction vessels	Yes	N/A	No	No
	Potential barrier effects from underwater noise	Yes	N/A	No	No
	Potential effects of any increased collision risk with construction vessels	Yes	N/A	No	No
	Potential effects of any changes to water quality	Yes	N/A	No	No
	Potential effects of any changes in prey availability	Yes	N/A	No	No
	Potential overall effects during construction	Yes	N/A	No	No
<i>Operation and maintenance (O&M) - Project Alone</i>					
Bottlenose dolphin	Potential effects of underwater noise from operational turbines	Yes	N/A	No	No
	Potential effects of underwater noise during O&M activities	Yes	N/A	No	No

European Sites and Qualifying Feature(s)	LSE Identified from	AEol alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
	Potential effects of underwater noise and disturbance from O&M vessels	Yes	N/A	No	No
	Potential effects from underwater noise during O&M	Yes	N/A	No	No
	Potential effects of any increased collision risk with O&M vessels	Yes	N/A	No	No
	Potential effects of any changes to water quality during O&M	Yes	N/A	No	No
	Potential effects of any changes in prey availability during O&M	Yes	N/A	No	No
	Potential overall effects during O&M	Yes	N/A	No	No
<i>In-combination</i>					
Bottlenose dolphin	Disturbance from underwater noise	N/A	Applicant: Yes		
			Natural England: TBC		
Humber Estuary SAC					
<i>Construction - Project Alone</i>					

European Sites and Qualifying Feature(s)	LSE Identified from	AEol alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
Grey seal	Potential effects of underwater noise during piling	Yes	N/A	No	No
	Potential effects of underwater noise during other construction activities	Yes	N/A	No	No
	Potential effects of underwater noise and disturbance from construction vessels	Yes	N/A	No	No
	Potential barrier effects from underwater noise	Yes	N/A	No	No
	Potential effects of any increased collision risk with construction vessels	Yes	N/A	No	No
	Potential for disturbance at grey seal haul-out sites	Yes	N/A	No	No
	Potential for disturbance of foraging grey seals at sea	Yes	N/A	No	No
	Potential effects of any changes to water quality	Yes	N/A	No	No

European Sites and Qualifying Feature(s)	LSE Identified from	AEol alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
	Potential for any changes in prey availability	Yes	N/A	No	No
<i>O&M - Project Alone</i>					
Grey seal	Potential effects of underwater noise from operational turbines	Yes	N/A	No	No
	Potential effects of underwater noise during O&M activities	Yes	N/A	No	No
	Potential effects of underwater noise and disturbance from O&M vessels	Yes	N/A	No	No
	Potential effects from underwater noise during O&M	Yes	N/A	No	No
	Potential effects of any increased collision risk with O&M vessels	Yes	N/A	No	No
	Potential for disturbance at grey seal haul-out sites during O&M	Yes	N/A	No	No
	Potential for disturbance of foraging grey seals at sea during O&M	Yes	N/A	No	No

European Sites and Qualifying Feature(s)	LSE Identified from	AEol alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
	Potential effects of any changes to water quality during O&M	Yes	N/A	No	No
	Potential for any changes in prey availability during O&M	Yes	N/A	No	No
<i>In-combination</i>					
Grey seal	Disturbance from underwater noise	N/A	Applicant: Yes		
			Natural England: TBC		
The Wash and North Norfolk Coast SAC					
<i>Construction - Project Alone</i>					
Harbour seal	Potential effects of underwater noise during piling	Yes	N/A	No	No
	Potential effects of underwater noise during other construction activities	Yes	N/A	No	No
	Potential effects of underwater noise and disturbance from construction vessels	Yes	N/A	No	No
	Potential barrier effects from underwater noise	Yes	N/A	No	No

European Sites and Qualifying Feature(s)	LSE Identified from	AEol alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
	Potential effects of any increased collision risk with construction vessels	Yes	N/A	No	No
	Potential for disturbance at harbour seal haul-out sites	Applicant: Yes	N/A	No	No
		Natural England: TBC			
	Potential for disturbance of foraging harbour seals at sea	Yes	N/A	No	No
	Potential effects of any changes to water quality	Yes	N/A	No	No
Potential for any changes in prey availability	Yes	N/A	No	No	
<i>O&M – Project Alone</i>					
Harbour seal	Potential effects of underwater noise from operational turbines	Yes	N/A	No	No
	Potential effects of underwater noise during O&M activities	Yes	N/A	No	No
	Potential effects of underwater noise and disturbance from O&M vessels	Yes	N/A	No	No

European Sites and Qualifying Feature(s)	LSE Identified from	AEol alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
	Potential effects from underwater noise during O&M	Yes	N/A	No	No
	Potential effects of any increased collision risk with O&M vessels	Yes	N/A	No	No
	Potential for disturbance at harbour seal haul-out sites during O&M	Yes	N/A	No	No
	Potential for disturbance of foraging harbour seals at sea during O&M	Yes	N/A	No	No
	Potential effects of any changes to water quality during O&M	Yes	N/A	No	No
	Potential for any changes in prey availability during O&M	Yes	N/A	No	No
<i>In-combination</i>					
Harbour seal	Disturbance from underwater noise	N/A	Applicant: Yes		
			Natural England: TBC		

5 Onshore National Site Network Sites

13. **Table 3** provides the Applicant's and Natural England's joint position in relation to conclusions of AEoI for onshore National Site Network Sites. The assessments on which these conclusions are based are provided within the **Report to Inform Appropriate Assessment (RIAA)** [APP-059] with updates to the screening and assessments for the River Wensum SAC being presented within the **RIAA (onshore) Technical Note** [REP2-050].
14. The Applicant and Natural England are agreed that all other designated onshore National Site Network Sites not described in **Table 3**, and potential pathways of effect, have been screened out of assessment.

Table 4 Joint Applicant and Natural England position in relation to conclusions of AEol for Onshore National Network Sites

European Sites and Qualifying Feature(s)	LSE Identified from	AEol alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
River Wensum Special Area of Conservation (SAC)					
Ranunculion fluitantis and Callitriche-Batrachion vegetation	Direct effects on Ranunculion fluitantis and Callitriche-Batrachion vegetation present within ex-situ habitats / functionally linked land of the SAC during the construction phase.	Yes	Yes	No	No
	Indirect effects on Ranunculion fluitantis and Callitriche-Batrachion vegetation present within the SAC boundary arising from geology / contamination and groundwater / hydrology effects during the construction phase.	Yes	Yes	No	No
	Indirect effects on Ranunculion fluitantis and Callitriche-Batrachion vegetation present within ex-situ habitats / functionally linked land of the SAC arising from geology / contamination and groundwater / hydrology effects during the construction phase.	Yes	Yes	No	No
Desmoulin's Whorl Snail	Direct effects on Desmoulin's whorl snail present within ex-situ habitats of the SAC during the construction phase.	Yes	Yes	No	No
	Indirect effects on Desmoulin's whorl snail present within the SAC boundary arising from geology / contamination and groundwater / hydrology effects during the construction phase.	Yes	Yes	No	No
	Indirect effects on Desmoulin's whorl snail present within ex-situ habitats / functionally linked land of the SAC arising from geology / contamination and groundwater / hydrology effects during the construction phase.	Yes	Yes	No	No
White-clawed crayfish	Direct effects on white-clawed crayfish present within ex-situ habitats / functionally linked land of the SAC during the construction phase	Yes	Yes	No	No
	Indirect effects on white-clawed crayfish present within the SAC boundary arising from geology / contamination and groundwater / hydrology effects during the construction phase.	Yes	<p>Applicant: Yes</p> <p>The Applicant considers that mitigation in the form of a bentonite breakout plan is already suitably secured through the Outline Code of Construction Practice (OCoCP) [REP5-029] (section 7.1.4). The Applicant understood Natural England to be in agreement and is clarifying the position. A full explanation is provided in the Applicant's Comments on the RIES, at RIES-Q8(b)ID 3-1-1.</p> <p>NE: No - NE advises without agreement of an outline bentonite breakout mitigation plan we are unable to agree that AEol can be excluded.</p> <p>However, as advised in REP3-145 once the mitigation measures are agreed, Natural England is likely to agree that a the risk of AEol to the River Wensum SAC will be significantly reduced.</p>	No	No

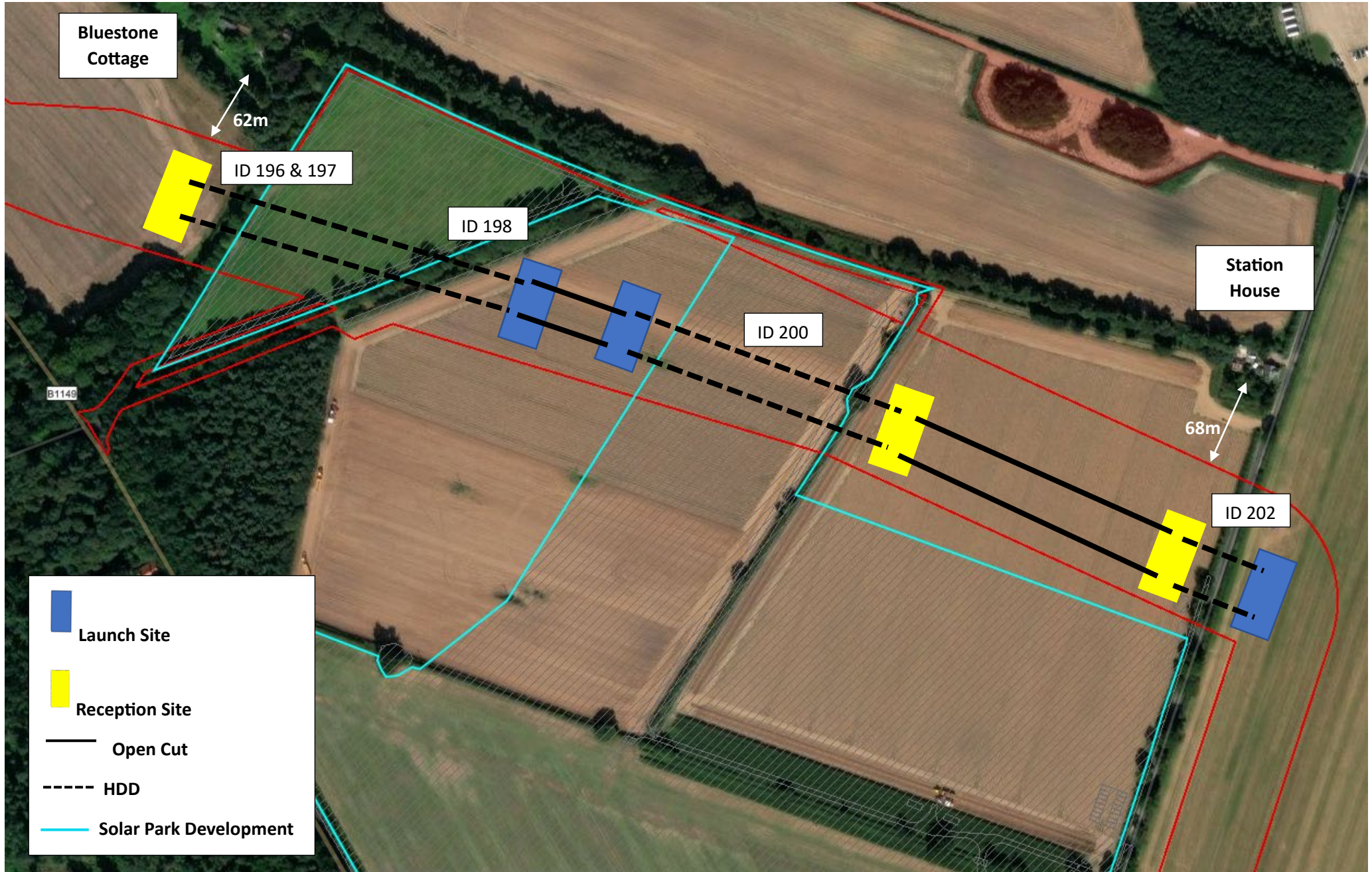
European Sites and Qualifying Feature(s)	LSE Identified from	AEol alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
	Indirect effects on white-clawed crayfish present within ex-situ habitats / functionally linked land of the SAC arising from geology / contamination and groundwater / hydrology effects during the construction phase.	Yes	Applicant: Yes (see above with reference to Bentonite Breakout Plan) NE: No (see above with reference to Bentonite Breakout Plan)	No	No
Brook lamprey	Direct effects on brook lamprey present within ex-situ habitats of the SAC during the construction phase.	Yes	Yes	No	No
	Indirect effects on brook lamprey present within the SAC boundary arising from geology / contamination and groundwater / hydrology effects during the construction phase.	Yes	Applicant: Yes (see above with reference to Bentonite Breakout Plan within the White-clawed crayfish section) NE: No (see above with reference to Bentonite Breakout Plan within the White-clawed crayfish section)	No	No
	Indirect effects on brook lamprey present within ex-situ habitats / functionally linked land of the SAC arising from geology / contamination and groundwater / hydrology effects during the construction phase.	Yes	Applicant: Yes (see above with reference to Bentonite Breakout Plan within the White-clawed crayfish section) NE: No (see above with reference to Bentonite Breakout Plan within the White-clawed crayfish section)	No	No
Bullhead	Direct effects on bullhead present within ex-situ / functionally linked land habitats of the SAC during the construction phase.	Yes	Yes	No	No
	Indirect effects on bullhead present within the SAC boundary arising from geology / contamination and groundwater / hydrology effects during the construction phase.	Yes	Applicant: Yes (see above with reference to Bentonite Breakout Plan within the White-clawed crayfish section) NE: No (see above with reference to Bentonite Breakout Plan within the White-clawed crayfish section)	No	No
	Indirect effects on bullhead present within ex-situ habitats of the SAC arising from geology / contamination and groundwater / hydrology effects during the construction phase.	Yes	Applicant: Yes (see above with reference to Bentonite Breakout Plan within the White-clawed crayfish section) NE: No (see above with reference to Bentonite Breakout Plan within the White-clawed crayfish section)	No	No
North Norfolk Coast Ramsar					
Nonbreeding pink-footed goose	Direct Effects on Wintering Birds Present in ex-situ Habitats / functionally linked land of the Ramsar Site	Yes	Applicant: Yes The Applicant considers that suitable mitigation is now secured following an amendment to the OEMP (Revision D to be submitted at Deadline 7). The Applicant is seeking to agree this with Natural England. A full explanation is	No	No

European Sites and Qualifying Feature(s)	LSE Identified from	AEol alone Excluded	AEol In-combination Excluded	HRA Derogations Engaged	Compensation Required
			provided in the Applicant's Comments on the RIES, at RIES-Q9ID 3-1-2.		
			NE: No - NE's concerns remain outstanding. See responses to the fourth written questions.	No	No
	Indirect Effects on Wintering Birds Present in ex-situ Habitats / functionally linked land of the Ramsar Site	Yes	Yes	No	No
Nonbreeding dark-bellied brent goose	Direct Effects on Wintering Birds Present in ex-situ Habitats / functionally linked land of the Ramsar Site	Yes	Yes	No	No
	Indirect Effects on Wintering Birds Present in ex-situ Habitats / functionally linked land of the Ramsar Site	Yes	Yes	No	No
Nonbreeding wigeon	Direct Effects on Wintering Birds Present in ex-situ Habitats / functionally linked land of the Ramsar Site	Yes	Yes	No	No
	Indirect Effects on Wintering Birds Present in ex-situ Habitats / functionally linked land of the Ramsar Site	Yes	Yes	No	No
Nonbreeding knot	Direct Effects on Wintering Birds Present in ex-situ Habitats / functionally linked land of the Ramsar Site	Yes	Yes	No	No
	Indirect Effects on Wintering Birds Present in ex-situ Habitats / functionally linked land of the Ramsar Site	Yes	Yes	No	No
Nonbreeding pintail	Direct Effects on Wintering Birds Present in ex-situ Habitats / functionally linked land of the Ramsar Site	Yes	Yes	No	No
	Indirect Effects on Wintering Birds Present in ex-situ Habitats / functionally linked land of the Ramsar Site	Yes	Yes	No	No
North Norfolk Coast SPA					
Wintering birds (dark-bellied Brent goose, pink-footed goose, knot, wigeon and wildfowl assemblage).	Direct Effects on Wintering Birds Present in ex-situ Habitats / functionally linked land of the SPA	Yes	Applicant: Yes (see above with reference to the section on the North Norfolk Coast Ramsar, non-breeding pink footed goose) NE: No - NE's concerns remain outstanding. See responses to the fourth written questions.	No	No
	Indirect Effects on Wintering Birds Present in ex-situ Habitats / functionally linked land of the SPA	Yes	Yes	No	No

Appendix A.3

*This appendix has been produced to support the Applicant's response to the Examining Authority's Fourth Written Questions – Q4.20.2.4. This document should be read alongside **The Applicant's Responses to the Examining Authority's Fourth Written Questions** [document reference 21.5]*

Supporting Documents for the Applicant's Responses to the Examining Authority's Fourth Written Questions
A.3 Indicative trenchless crossing locations at Stark Energy proposed solar park development - Q4.20.2.4



Appendix A.4

*This appendix has been produced to support the Applicant's response to the Examining Authority's Fourth Written Questions – Q4.8.2.1(d). This document should be read alongside **The Applicant's Responses to the Examining Authority's Fourth Written Questions** [document reference 21.5]*



Little Crow

Solar Park

Little Crow Solar Park, Scunthorpe

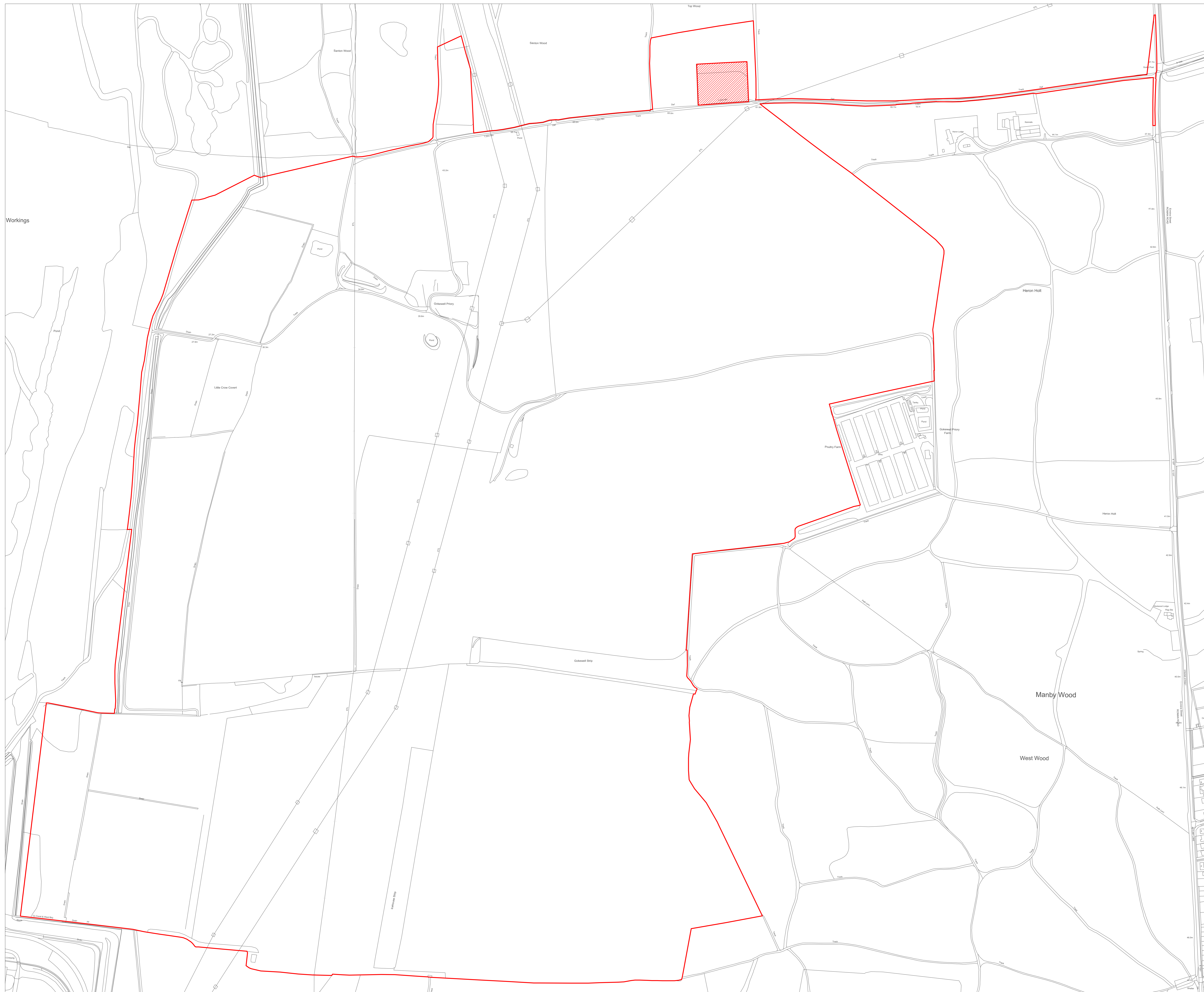
LAND PLAN INCLUDING ORDER LIMITS

Revision:
APFP Reg:
PINS Reference:

Submission
5(2)(i)(i)
EN010101

Author:
Date:

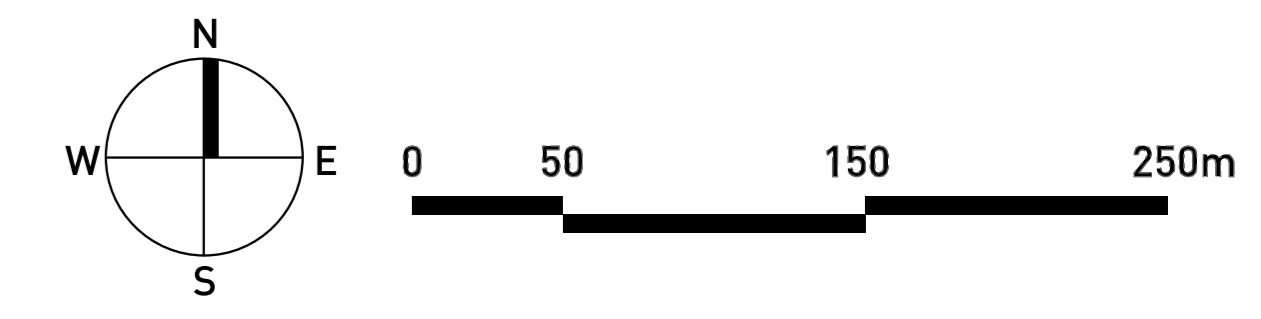
Pegasus Group
November 2020



KEY: LAND & ORDER LIMITS PLAN

- ORDER LIMITS
- AREA EXCLUDED FROM ORDER LIMITS

DOCUMENT REFERENCE NUMBER: 2.1 LC DRW
APFP REG 5 (2)(i)(i)



LITTLE CROW SOLAR PARK - LAND PLAN INCLUDING ORDER LIMITS



Appendix A.5

*This appendix has been produced to support the Applicant's response to the Examining Authority's Fourth Written Questions – Q4.8.2.1(d). This document should be read alongside **The Applicant's Responses to the Examining Authority's Fourth Written Questions** [document reference 21.5]*

202* No. 0000

INFRASTRUCTURE PLANNING

The Hornsea Four Offshore Wind Farm Order

Made - - - - []

Coming into force - - []

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An application has been made to the Secretary of State under section 37 of the Planning Act 2008 (“the 2008 Act”)(a) for an order granting development consent.

The application was examined by the Examining Authority, appointed by the Secretary of State pursuant to section 61(b) and section 65(c) of Part 6 of the 2008 Act and carried out in accordance with Chapter 4 of that Act and with the Infrastructure Planning (Examination) Procedure Rules 2010(d). The Examining Authority has submitted a report to the Secretary of State under section 74(2)(e) of the 2008 Act.

The Secretary of State has considered the report and recommendation of the Examining Authority, has taken into account the environmental information in accordance with regulation 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(f) and, as a national policy statement has effect in relation to the proposed development, has had regard to the documents and matters referred to in section 104(2)(g) of the 2008 Act.

(a) 2008 c.29. Parts 1 to 7 were amended by Chapter 6 of Part 6 of the Localism Act 2011 (c.20).
 (b) Section 61 was amended by section 128(2) and Schedule 13, paragraph 18 to the Localism Act 2011 and by section 26 of the Infrastructure Act 2015 (c.7).
 (c) Section 65 was amended by Schedule 13 paragraph 22(2) and Schedule 25, paragraph 1 to the Localism Act 2011 and by section 27(1) of the Infrastructure Act 2015.
 (d) S.I. 2010/103. This instrument was amended by S.I. 2012/635.
 (e) Section 74 was amended by sections 128(2) and 237 and by Schedule 13, paragraph 29 and Schedule 25, paragraph 1, to the Localism Act 2011.
 (f) S.I. 2017/572.
 (g) Section 104 was amended by section 58(5) of the Marine and Coastal Access Act 2009 (c.23) and by section 128(2) of the and Schedule 13, paragraphs 1 and 49(1) to (6) of the Localism Act 2011.

The Secretary of State, having decided the application, has determined to make an Order giving effect to the proposals comprised in the application on terms that in the opinion of the Secretary of State are not materially different from those proposed in the application.

The Secretary of State is satisfied that open space within the Order land, when burdened with any new rights authorised for compulsory acquisition under the terms of this Order, will be no less advantageous than it was before such acquisition, to the persons whom it is vested, other persons, if any, entitled to rights of common or other rights, and the public, and that, accordingly, section 132(3)(a) of the 2008 Act applies.

The Secretary of State, in exercise of the powers conferred by sections 114, 115, 120(b), 122, 123 and 149A of the 2008 Act, makes the following Order—

PART 1

PRELIMINARY

Citation and commencement

1. This Order may be cited as the Hornsea Four Offshore Wind Farm Order 20[] and comes into force on [] 202[].

Interpretation

2.—(1) In this Order—

“the 1961 Act” means the Land Compensation Act 1961(c);

“the 1965 Act” means the Compulsory Purchase Act 1965(d);

“the 1980 Act” means the Highways Act 1980(e);

“the 1981 Act” means the Compulsory Purchase (Vesting Declarations) Act 1981(f);

“the 1989 Act” means the Electricity Act 1989(g);

“the 1990 Act” means the Town and Country Planning Act 1990(h);

“the 1991 Act” means the New Roads and Street Works Act 1991(i);

“the 2000 Act” means the Countryside and Rights of Way Act 2000(j);

“the 2003 Act” means the Communications Act 2003(k);

“the 2004 Act” means the Energy Act 2004(l);

“the 2008 Act” means the Planning Act 2008;

“the 2009 Act” means the Marine and Coastal Access Act 2009(m);

(a) Section 132 was amended by section 24(3) of the Growth and Infrastructure Act 2013 (c.27).

(b) Sections 114,115 and 120 were amended by sections 128(2) and 140 and Schedule 13, paragraphs 1, 55(1), (2) and 60(1) and (3) of the Localism Act 2011. Relevant amendments were made to section 115 by section 160(1) to (6) of the Housing and Planning Act 2016 (c.22).

(c) 1961 c.33.

(d) 1965 c.56.

(e) 1980 c.66.

(f) 1981 c.66.

(g) 1989 c.29.

(h) 1990 c.8.

(i) 1991 c.22. Section 48(3A) was inserted by section 124 of the Local Transport Act 2008 (c.26). Sections 79(4), 80(4), and 83(4) were amended by section 40 of, and Schedule 1 to, the Traffic Management Act 2004 (c.18).

(j) 2000 c.37.

(k) 2003 c.21.

(l) 2004 c.20.

(m) 2009 c.23.

“access land” has the same meaning as in section 1(1) (principal definitions for Part I) of the 2000 Act;

“access to works plan” means the plan or plans certified as the access to works plan or plans by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“ancillary works” means the ancillary works described in Part 2 of Schedule 1 (ancillary works) and any other works authorised by this Order and which are not development within the meaning of section 32 of the 2008 Act;

“authorised development” means the development and associated development described in Part 1 of Schedule 1 (authorised development) and any other development authorised by this Order that is development within the meaning of section 32 of the 2008 Act;

“authorised project” means the authorised development and the ancillary works authorised by this Order;

“the book of reference” means the document certified by the Secretary of State as the book of reference for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“box-type gravity base structures” means a structure principally of steel, concrete, or steel and concrete with a square base which rests on the seabed due to its own weight with or without added ballast or additional skirts and associated equipment including J-tubes, corrosion protection systems and access platform(s) and equipment;

“bridge link” means a steel truss structure with provision for overhead clearance for personnel, lighting fixtures and ancillary cabling, which can be used as a link for interconnection between any combination of permanent offshore electrical installations and/or offshore accommodation platform;

“buoy” means any floating device used for navigational purposes or measurement purposes, including LIDAR and wave buoys;

“cables” means cables for the transmission of electricity, including one or more cable crossings;

“cable circuits” means a number of electrical conductors necessary to transmit electricity between two points within the authorised development; this may comprise, depending on transmission technology, one or more conductors which may be bundled as one cable or take the form of separate cables, and the circuit may include one or more auxiliary cables (normally fibre optic cables) for the purpose of control, monitoring, protection or general communications;

“cable crossings” means a crossing of existing sub-sea cables or pipelines or other existing infrastructure by a cable or, where cables run together in parallel, a set of cables, authorised by this Order together with cable protection;

“cable protection” means physical measures for the protection of cables including but not limited to concrete mattresses, split pipe system, and/or rock placement (including material used for cable crossings);

“carriageway” has the same meaning as in section 329 of the 1980 Act;

“commence”, means—

- (a) in relation to works seaward of MHWS, the first carrying out of any licensed marine activities authorised by the deemed marine licences, save for operations consisting of pre-construction surveys and monitoring approved under the deemed marine licences; and
- (b) in respect of any other works comprised in the authorised project, the first carrying out of any material operation (as defined in section 155 of the 2008 Act) forming part of the authorised project other than onshore site preparation works,

and the words “commencement” and “commenced” must be construed accordingly;

“commissioning” means the process of assuring that all systems and components of the authorised development are tested to verify that they function and are operable in accordance with the design objectives, specifications and operational requirements of the undertaker;

“commitments register” means the document certified as the commitments register by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“connection works” means Work Nos. 6 to 10 and any related further associated development in connection with those works;

“deemed marine licences” means the marine licences set out in Schedules 11 and 12;

“the Driffield Navigation Trust” means the Driffield Navigation Trust of 5 New Walk Close, Driffield, East Yorkshire, England, YO25 5LG (Company No. 01468822);

“energy balancing infrastructure” means infrastructure used for the balancing of the output of electrical energy to the national grid;

“environmental statement” means the document certified as the environmental statement by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“gravity base structure” means a structure principally of steel, concrete, or steel and concrete with a base which tapers as it rises which rests on the seabed due to its own weight with or without added ballast or additional skirts and associated equipment including J-tubes, corrosion protection systems and access platform(s) and equipment;

“HAT” means highest astronomical tide;

“highway” and “highway authority” have the same meaning as in the 1980 Act^(a)

“Historic England” means the Historic Buildings and Monuments Commission for England;

“horizontal directional drilling” refers to a trenchless boring technique for installing cables, cable ducts and other associated apparatus involving drilling in an arc between two points;

“HVAC” means high voltage alternating current;

“HVDC” means high voltage direct current;

“interconnector cable” means a network of cables between the offshore substations;

“intrusive environmental surveys” means an environmental survey that requires or is facilitated by breaking the surface of the ground or seabed;

“jacket foundation” means a lattice type structure constructed of steel and additional equipment such as, J-tubes, corrosion protection systems and access platforms attached to the sea bed by means of either a suction bucket or piles;

“joint bay” means an excavation located at regular intervals along the cable route consisting of a concrete flat base slab constructed beneath the ground to facilitate the jointing together of the cables;

“land plan” means the plan or plans certified as the land plan or plans by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“large offshore HVDC converter substation” means the large version of the offshore converter substations assessed in the environment statement;

“large offshore transformer substation” means the large version of the offshore transformer substations assessed in the environment statement;

“LAT” means lowest astronomical tide;

“lead local flood authority” has the meaning in section 6(7) of the Flood and Water Management Act 2010^(a);

(a) “highway” is defined in section 328(1) for “highway authority” see section 1. Relevant amendments are as follows: section 1 was amended by sections 8 and 102 and Schedules 4, paragraph 1 and Schedule 17 of the Local Government Act 1985 (c.51), by section 21 of the 1991 Act and by section 1(6) and Schedule 1, paragraphs 1 to 4 of the Infrastructure Act 2015 (c.7).

“link box” means the underground metal box placed within a plastic or concrete pit where the metal sheaths between adjacent export cable sections are connected and earthed installed within a ground level manhole or inspection chamber to allow access to the link box for regular maintenance or fault-finding purposes;

“logistics compound” means a construction site associated with the connection works including portable offices, welfare facilities, parking and storage for construction of the authorised project;

“maintain” includes inspect, upkeep, repair, adjust, and alter and further includes remove, reconstruct and replace (including replenishment of cable protection) but does not include the removal, reconstruction or replacement of foundations associated with the offshore works, to the extent assessed in the environmental statement and any derivative of maintain must be construed accordingly;

“Marine Management Organisation” or “MMO” means the Marine Management Organisation, Lancaster House, Hampshire Court, Newcastle upon Tyne, NE4 7YH who is the body created under the 2009 Act and who is responsible for the monitoring and enforcement of the deemed marine licences;

“mean high water springs” or “MHWS” means the highest level which spring tides reach on average over a period of time;

“mean low water springs” or “MLWS” means the lowest level which spring tides reach on average over a period of time;

“monopile foundation” means a steel pile, driven and/or drilled into the seabed and associated equipment including J-tubes, corrosion protection systems and access platforms and equipment;

“mono suction bucket foundation” means a steel cylindrical structure which partially or fully penetrates the seabed and remains in place using its own weight and hydrostatic pressure differential, and may include additional equipment such as J-tubes, corrosion protection systems and access platforms;

“offshore accommodation platform” means a structure above LAT and attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents), containing housing accommodation, storage, workshop, auxiliary equipment, and facilities for operating, maintaining and controlling the wind turbine generators and offshore electrical installations;

“offshore electrical installations” means the small offshore transformer substations, the large offshore transformer substations, the offshore HVAC booster stations, the small offshore HVDC converter substations and the large offshore HVDC converter substations forming part of the authorised development;

“offshore HVAC booster station” means a structure above LAT and attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents), containing—

- (a) electrical equipment required to provide reactive power compensation; and
- (b) housing accommodation, storage, workshop, auxiliary equipment, radar and facilities for operating, maintaining and controlling the substation;

“offshore HVDC converter station” means a structure above LAT and attached to the seabed by means of a foundation, with equipment to convert the three-phase HVAC power generated at the wind turbine generators into HVDC power;

“the offshore Order limits and grid coordinates plan” means the plan or plans certified by the Secretary of State as the offshore Order limits and grid coordinates plan for the purposes of this Order under article 38 (certification of plans and documents, etc.);

(a) 2010 c.29.

“offshore transformer substation” means a structure above LAT and attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents), containing—

- (a) electrical equipment required to switch, transform, convert electricity generated at the wind turbine generators to a higher voltage and provide reactive power compensation; and
- (b) housing accommodation, storage, workshop auxiliary equipment, radar and facilities for operating, maintaining and controlling the substation or wind turbine generators;

“offshore works” means Work Nos. 1, 2, 3, 4 and 5 and any related further associated development in connection with those works;

“offshore works plans” means the plan or plans certified as the offshore works plans by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“onshore construction works” means—

- (a) temporary haul roads;
- (b) vehicular accesses; and
- (c) logistics compound(s);

“onshore HVDC/HVAC substation” means a compound, comprising the onshore HVDC converter station or the onshore HVAC substation, including any energy balancing infrastructure and electrical equipment required to switch, transform, convert electricity and provide reactive power compensation, with external landscaping and means of access;

“onshore Order limits plan” means the plans certified by the Secretary of State as the onshore Order limits plan for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“onshore site preparation works” means operations consisting of site clearance, pre-planting of landscaping works, ecological mitigation works, archaeological investigations, intrusive environmental surveys, investigations for the purpose of assessing ground conditions, remedial work in respect of any contamination or other adverse ground conditions, diversion and laying of services, erection of any temporary means of enclosure, creation of site accesses and the temporary display of site notices or advertisements;

“onshore works plans” means the plan or plans certified as the onshore works plans by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“operation” means the undertaking of activities authorised by this Order which are not part of the construction, commissioning or decommissioning of the authorised development;

“the Order land” means the land shown on the land plans which is within the limits of land to be acquired or used and described in the book of reference;

“the Order limits” means the limits shown on the offshore Order limits and grid coordinates plan and the onshore Order limits plan within which the authorised project may be carried out, whose grid coordinates seaward of MHWS are set out in paragraph 2 of Part 1 of Schedule 1 (authorised development) to this Order;

“outline cable specification and installation plan” means the document certified as the outline cable specification and installation plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline code of construction practice” means the document certified as the outline code of construction practice by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline construction traffic management plan” means Appendix F of the document certified as the outline code of construction practice plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline design plan” means the document certified as the outline design plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline ecological management plan” means the document certified as the outline ecological management plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline employment and skills plan” means the document certified as the outline employment and skills plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline energy balancing infrastructure HazID report” means the document certified as the outline energy balancing infrastructure HazID report by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline enhancement strategy” means the document certified as the outline enhancement strategy by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline landscape management plan” means the document certified as the outline landscape management plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline marine mammal mitigation protocol” means the document certified as the outline marine mammal mitigation protocol by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline marine monitoring plan” means the document certified as the outline marine monitoring plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline marine written scheme of investigation” means the document certified as the outline marine written scheme of investigation by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline net gain strategy” means the document certified as the outline net gain strategy by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline onshore infrastructure drainage strategy” means the document certified as the outline onshore infrastructure drainage strategy by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline southern north sea special area of conservation site integrity plan” means the document certified as the outline southern north sea special area of conservation site integrity plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline written scheme of investigation for onshore archaeology” means the document certified as the outline written scheme of investigation for onshore archaeology by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“pin piles” means steel cylindrical piles driven and/or drilled into the seabed to secure jacket foundations;

“pontoon gravity base type 1 structure” means a structure principally of steel, concrete, or steel and concrete with a base made up of up to two rectangular pontoons which rests on the seabed due to its own weight with or without added ballast or additional skirts and associated equipment including J-tubes, corrosion protection systems and access platform(s) and equipment;

“pontoon gravity base type 2 structure” means a structure principally of steel, concrete, or steel and concrete with a base made up of a pontoon arranged in a rectangle around an open centre which rests on the seabed due to its own weight with or without added ballast or

additional skirts and associated equipment including J-tubes, corrosion protection systems and access platform(s) and equipment;

“pro-rata annex” means the document certified as the pro-rata annex by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“public rights of way plan” means the plan or plans certified as the public rights of way plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“relevant highway authority” means East Riding of Yorkshire Council, or any successor to it as highway authority for the land in question;

“relevant highway authorities” means East Riding of Yorkshire Council and Hull City Council, or any successor to them as highway authorities for the land in question;

“relevant planning authority” means East Riding of Yorkshire Council, or any successor to it as planning authority for the land in question;

“requirements” means, or a reference to a numbered requirement is a reference to, those matters set out in Part 3 of Schedule 1 (requirements) to this Order;

“scour protection” means measures to prevent loss of seabed sediment around any structure placed in or on the seabed by use of protective aprons, mattresses, or rock and gravel placement;

“section 106 agreements” means the three agreements made under section 106 of the 1990 Act as follows—

- (a) dated 15 November 1990 between (1) The Council of the East Yorkshire Borough of Beverley; (2) Clive Kingston Soames, Margaret Eileen Soames and Andrew Mark Soames and (3) Barclays Bank PLC;
- (b) dated 13 July 2007, between (1) Lissett Airfield Wind Farm Limited; (2) James Herbert Tennant; and (3) East Riding of Yorkshire Council; and
- (c) dated 7 October 2015, between (1) East Riding of Yorkshire Council; (2) Christopher Branston Foster; (3) Susan Verena Foster; (4) Richard Edward Foster; and (5) National Westminster Bank PLC;

“small offshore HVDC converter substation” means the small version of the offshore transformer substations assessed in the environment statement;

“small offshore transformer substation” means the small version of the offshore transformer substations assessed in the environment statement;

“SNCB” means statutory nature conservation body, being the appropriate nature conservation body as refined in Regulation 5 of the Conservation of Habitats and Species Regulations 2017 or its equivalent in the Conservation of Offshore Marine Habitats and Species Regulations 2017;

“special category land” means the land comprising plots 1, 2, 2A, 3, 3A, 4, 4A, 5, 6 and 6A shown on the land plans and described in the book of reference;

“statutory undertaker” means any person falling within section 127(8) of the 2008 Act and a public communications provider as defined in section 151 of the 2003 Act;

“street” means a street within the meaning of section 48 of the 1991 Act(a), together with land on the verge of a street or between two carriageways, and includes any footpath and any part of a street;

“street authority”, in relation to a street, has the same meaning as in Part 3 of the 1991 Act(b);

(a) Section 48 was amended by section 124(2) of the Local Transport Act 2008 (c.26).

(b) “street authority” is defined in section 49, which was amended by paragraph 117 of Schedule 1 to the Infrastructure Act (c.7).

“streets plan” means the plan or plans certified as the streets plan or plans by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“suction bucket” means a steel cylindrical structure attached to the legs of a jacket foundation which partially or fully penetrates the seabed and remains in place using its own weight and hydrostatic pressure differential;

“transition joint bay” means the underground concrete bays in Work No. 6 where the offshore export cable circuits comprised in Work No. 6 are jointed to the onshore export cable circuits;

“transition piece” means the metal structure attached to the top of the foundation where the base of the wind turbine generator is connected and may include additional equipment such as J-tubes, corrosion protection systems, boat access systems, access platforms, craneage, radar, electrical transmission equipment and associated equipment;

“tree preservation order and hedgerow plan” means the plan or plans certified as the tree preservation order and hedgerow plan or plans by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“undertaker” means, subject to article 5(2) (benefit of the Order), Orsted Hornsea Project Four Limited (company number 08584182);

“vessel” means every description of vessel, however propelled or moved, and includes a non-displacement craft, a personal watercraft, a seaplane on the surface of the water, a hydrofoil vessel, a hovercraft or any other amphibious vehicle and any other thing constructed or adapted for movement through, in, on or over water and which is at the time in, on or over water;

“water attenuation feature” means an area within which sustainable drainage systems measures are to be adopted to facilitate attenuation and/or storage of surface water drainage;

“wind turbine generator” means a structure comprising a tower, rotor with three blades connected at the hub, nacelle and ancillary electrical and other equipment which may include J-tube(s), transition piece, access and rest platforms, access ladders, boat access systems, corrosion protection systems, fenders and maintenance equipment, helicopter landing facilities and other associated equipment, fixed to a foundation or transition piece; and

“working day” means a day which is not a weekend, bank holiday or public holiday in England.

(2) References in this Order to rights over land include references to rights to do or restrain or to place and maintain, anything in, on or under land or in the air-space above its surface and to any trusts or incidents (including restrictive covenants) to which the land is subject and references in this Order to the imposition of restrictive covenants are references to the creation of rights over the land which interfere with the interests or rights of another and are for the benefit of land which is acquired under this Order or which is an interest otherwise comprised in the Order land.

(3) All distances, directions, capacities, volumes and lengths referred to in this Order are approximate save in respect of the parameters referred to in—

- (a) requirements 2 to 5 in Part 3 of Schedule 1 (requirements);
- (b) conditions 1 to 3 in Part 2 of Schedule 11 (conditions); and
- (c) conditions 1 to 3 in Part 2 of Schedule 12 (conditions).

(4) Any reference in this Order to a work identified by the number of the work is to be construed as a reference to the work of that number authorised by this Order.

(5) The expression “includes” is to be construed without limitation unless the contrary intention appears.

(6) A reference to any statute, order, regulation or similar instrument is construed as a reference to a statute, order, regulation or instrument as amended by any subsequent statute, order, regulation or instrument or as contained in any subsequent re-enactment.

(7) Any reference in this Order or the documents certified by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.) to a dimension

measured from LAT may be converted to a measurement from HAT by subtracting 4.71m from the measurement from LAT.

PART 2 PRINCIPAL POWERS

Development consent etc. granted by this Order

3.—(1) Subject to the provisions of this Order and to the requirements, the undertaker is granted—

- (a) development consent for the authorised development; and
- (b) consent for the ancillary works,

to be carried out within the Order limits.

(2) Work Nos. 1 to 5 (save for those elements of Work No. 5(a) located landward of MHWS in order to connect to Work No. 6) must be constructed within the Order limits seaward of MHWS and Work Nos. 6 to 10 (save for those elements of Work Nos. 9(a) and 9(d) located seaward of MHWS for foreshore access) must be constructed within the Order limits landward of MHWS.

Power to maintain the authorised project

4.—(1) The undertaker may at any time maintain the authorised project, except to the extent that this Order or an agreement made under this Order provides otherwise.

(2) The power to maintain conferred under paragraph (1) does not relieve the undertaker of any requirement to obtain any further licence under Part 4 of the 2009 Act (marine licensing) for offshore works not covered by the deemed marine licences.

Benefit of the Order

5.—(1) The undertaker may with the written consent of the Secretary of State—

- (a) transfer to another person (“the transferee”) any or all of the benefit of the provisions of this Order (including the deemed marine licences, in whole or in part) and such related statutory rights as may be agreed between the undertaker and the transferee; and
- (b) grant to another person (“the lessee”) for a period agreed between the undertaker and the lessee any or all of the benefit of the provisions of this Order (including the deemed marine licences, in whole or in part) and such related statutory rights as may be so agreed.

except where paragraph (6) applies, in which case the consent of the Secretary of State is not required.

(2) Where an agreement has been made in accordance with paragraph (1) references in this Order to the undertaker, except in paragraphs (5), (7), (10) and the first reference in paragraph (11) include references to the transferee or lessee.

(3) The undertaker must consult the Secretary of State before making an application for consent under this article by giving notice in writing of the proposed application and the Secretary of State must provide a response within four weeks of receipt of the notice.

(4) The Secretary of State must consult the MMO before giving consent to the transfer or grant to another person of the whole or part of the benefit of the provisions of the deemed marine licences.

(5) Where the undertaker has transferred any benefit, or for the duration of any period during which the undertaker has granted any benefit, under paragraph (1)—

- (a) the benefit transferred or granted (“the transferred benefit”) includes any rights that are conferred, and any obligations that are imposed, by virtue of the provisions to which the benefit relates;

- (b) the transferred benefit resides exclusively with the transferee or, as the case may be, the lessee and the transferred benefit is not enforceable against the undertaker; and
- (c) the exercise by a person of any benefits or rights conferred in accordance with any transfer or grant under paragraph (1) is subject to the same restrictions, liabilities and obligations as would apply under this Order if those benefits or rights were exercised by the undertaker.

(6) This paragraph applies to any provisions of this Order and its related statutory rights where—

- (a) the transferee or lessee is the holder of a licence under section 6 (licences authorising supply, etc) of the 1989 Act; or
- (b) the time limits for claims for compensation in respect of the acquisition of land or effects upon land under this Order have elapsed and—
 - (i) no such claims have been made,
 - (ii) any such claim has been made and has been compromised or withdrawn,
 - (iii) compensation has been paid in final settlement of any such claim,
 - (iv) payment of compensation into court has taken place in lieu of settlement of any such claim, or
 - (v) it has been determined by a tribunal or court of competent jurisdiction in respect of any such claim that no compensation shall be payable.

(7) Prior to any transfer or grant under this article taking effect the undertaker must give notice in writing to the Secretary of State, and if such transfer or grant relates to the exercise of powers in their area, to the MMO and the relevant planning authority.

(8) The notice required under paragraphs (3) and (7) must—

- (a) state—
 - (i) the name and contact details of the person to whom the benefit of the provisions will be transferred or granted;
 - (ii) subject to paragraph (9), the date on which the transfer will take effect;
 - (iii) the provisions to be transferred or granted; and
 - (iv) the restrictions, liabilities and obligations that, in accordance with paragraph (5)(c), will apply to the person exercising the powers transferred or granted; and
 - (v) where paragraph (6) does not apply, confirmation of the availability and adequacy of funds for compensation associated with the compulsory acquisition of the Order land.
- (b) be accompanied by—
 - (i) where relevant, a plan showing the works or areas to which the transfer or grant relates; and
 - (ii) a copy of the document effecting the transfer or grant signed by the undertaker and the person to whom the benefit of the powers will be transferred or granted.

(9) The date specified under paragraph (8)(a)(ii) in respect of a notice served in respect of paragraph (7) must not be earlier than the expiry of fourteen days from the date of the receipt of the notice.

(10) The notice given under paragraph (7) must be signed by the undertaker and the person to whom the benefit of the powers will be transferred or granted as specified in that notice.

(11) Sections 72(7) and (8) of the 2009 Act (variation, suspension, revocation and transfer) do not apply to a transfer or grant of the whole or part of the benefit of the provisions of the deemed marine licences to another person by the undertaker pursuant to an agreement under paragraph (1) save that the MMO may amend any deemed marine licence granted under Schedule 11 or Schedule 12 of the Order to correct the name of the undertaker to the name of a transferee or lessee under this article 5 (benefit of the Order).

Application and modification of legislative provisions

6.—(1) The following provisions are modified to the extent specified, or do not apply, in relation to the construction or works carried out for the purpose of, or in connection with, the construction or maintenance of the authorised project—

- (a) Regulation 6 of the Hedgerows Regulations 1997^(a) is modified so as to read for the purposes of this Order only as if there were inserted after paragraph (1)(j) the following—
“or (k) for carrying out development which has been authorised by an order granting development consent pursuant to the Planning Act 2008.”
- (b) the provisions of the Neighbourhood Planning Act 2017^(b) insofar as they relate to temporary possession of land under articles 28 (temporary use of land for carrying out the authorised project) and 29 (temporary use of land for maintaining the authorised project) of this Order.
- (c) the Environmental Permitting (England and Wales) Regulations 2016, to the extent that they require a permit for anything that would have required consent made under section 109 of the Water Resources Act 1991 immediately before the repeal of that section or for any activities defined under the Environmental Permitting (England and Wales) Regulations 2016 as flood risk activities;
- (d) the provisions of any byelaws made under, or having effect as if made under, paragraphs 5, 6 or 6A of Schedule 25 of the Water Resources Act 1991 that require consent or approval for the carrying out of works;
- (e) section 23 of the Land Drainage Act 1991 (prohibition of obstructions etc. in watercourses);
- (f) the provisions of any byelaws made under section 66 of the Land Drainage Act 1991 (powers to make byelaws) that require consent or approval for the carrying out of works; and
- (g) section 28E (duties in relation to sites of scientific interest) of the Wildlife and Countryside Act 1981^(c).

(2) Nothing in this article overrides the requirement for an environmental permit under Regulation 12(1)(b) (requirement for environmental permit) of the Environmental Permitting (England and Wales) Regulations 2016.

Defence to proceedings in respect of statutory nuisance

7.—(1) Where proceedings are brought under section 82(1) of the Environmental Protection Act 1990^(d) (summary proceedings by persons aggrieved by statutory nuisances) in relation to a nuisance falling within paragraph (g) of section 79(1) of that Act (noise emitted from premises so as to be prejudicial to health or a nuisance) no order is to be made, and no fine is to be imposed, under section 82(2) of that Act if—

- (a) the defendant shows that the nuisance—
 - (i) relates to premises used by the undertaker for the purposes of or in connection with the construction, maintenance or decommissioning of the authorised project and that the nuisance is attributable to the carrying out of the authorised project in accordance with a notice served under section 60 (control of noise on construction sites), or a

(a) S.I. 1997/1160. Relevant amendments to this instrument have been made by section 73(2) of the Countryside and Rights of Way Act 2000 (c.37) and by S.I. 2003/2155, S.I. 2006/1177, S.I. 2009/1307 and S.I. 2105/377.

(b) 2017 c.20.

(c) 1981 c.69. Section 28E was inserted by section 75(1) of, and paragraph 1 of Schedule 9 to, the Countryside and Rights of Way Act 2000 (c.37). It was amended by section 105(1) of, and paragraph 79 of Schedule 11 to, the Natural Environment and Rural Communities Act 2006 (c.16). There are other amendments which are not relevant to this Order.

(d) 1990 c.43. Relevant amendments to this are as follows: section 82 was amended by section 107 and Schedule 17 paragraph 6 of the Environment Act 1995 (c.25) and section 5(2) of the Noise and Statutory Nuisance Act 1993 (c.40), and section 79 was amended by sections 101 and 102 of the Clean Neighbourhoods and Environment Act 2005 (c.16), by section 2 of the Noise and Statutory Nuisance Act 1993 and by section 120 and Schedule 22 paragraph 89 of the Environment Act 2005.

consent given under section 61 (prior consent for work on construction sites) of the Control of Pollution Act 1974; or

(ii) is a consequence of the construction, maintenance or decommissioning of the authorised project and that it cannot reasonably be avoided; or

(b) the defendant shows that the nuisance—

(i) relates to premises used by the undertaker for the purposes of or in connection with the use of the authorised project and that the nuisance is attributable to the use of the authorised project which is being used in compliance with requirement 22 (control of noise during the operational phase); or

(ii) is a consequence of the use of the authorised project and that it cannot reasonably be avoided.

(2) Section 61(9) (consent for work on construction site to include statement that it does not of itself constitute a defence to proceedings under section 82 of the Environmental Protection Act 1990) of the control of Pollution Act 1974 does not apply where the consent relates to the use of premises by the undertaker for purposes of or in connection with the construction, maintenance or decommissioning of the authorised project.

PART 3

STREETS

Street works

8.—(1) The undertaker may, for the purposes of the authorised project, enter on so much of any of the streets specified in Schedule 2 (streets subject to street works) as is within the Order limits and may—

(a) break up or open the street, or any sewer, drain or tunnel within or under it;

(b) tunnel or bore under the street;

(c) place and keep apparatus in the street;

(d) maintain apparatus in the street or change its position; and

(e) execute any works required for or incidental to any works referred to in sub-paragraphs (a) to (d).

(2) The authority given by paragraph (1) is a statutory right for the purposes of sections 48(3) (streets, street works and undertakers) and 51(1) (prohibition of unauthorised street works) of the 1991 Act.

(3) In this article “apparatus” has the same meaning as in Part 3 (street works in England and Wales) of the 1991 Act.

Application of the 1991 Act

9.—(1) The provisions of the 1991 Act mentioned in paragraph (2) that apply in relation to the carrying out of street works under that Act and any regulations made or code of practice issued or approved under those provisions apply (with all necessary modifications) in relation to—

(a) the carrying out of works under article 8 (street works); and

(b) the temporary stopping up, temporary alteration or temporary diversion of a street by the undertaker under article 10 (temporary stopping up of streets and public rights of way),

whether or not the carrying out of the works or the stopping up, alteration or diversion constitutes street works within the meaning of that Act.

(2) The provisions of the 1991 Act^(a) are—

- (a) subject to paragraph (3), section 55 (notice of starting date of works);
- (b) section 57 (notice of emergency works);
- (c) section 60 (general duty of undertakers to co-operate);
- (d) section 68 (facilities to be afforded to street authority);
- (e) section 69 (works likely to affect other apparatus in the street);
- (f) section 76 (liability for cost of temporary traffic regulation);
- (g) section 77 (liability for cost of use of alternative route); and
- (h) all provisions of that Act that apply for the purposes of the provisions referred to in subparagraphs (a) to (g).

(3) Section 55 of the 1991 Act as applied by paragraph (2) has effect as if references in section 57 of that Act to emergency works included a reference to a stopping up, alteration or diversion (as the case may be) required in a case of emergency.

Temporary stopping up of streets and public rights of way

10.—(1) The undertaker, during and for the purposes of carrying out the authorised project, may temporarily stop up, alter or divert any street or public right of way and may for any reasonable time—

- (a) divert the traffic or a class of traffic from the street or public right of way; and
- (b) subject to paragraph (3), prevent all persons from passing along the street or public right of way.

(2) Without limiting paragraph (1), the undertaker may use any street or public right of way temporarily stopped up under the powers conferred by this article and within the Order limits as a temporary working site.

(3) The undertaker must provide reasonable access for pedestrians going to or from premises abutting a street or public right of way affected by the temporary stopping up, alteration or diversion of a street or public right of way under this article if there would otherwise be no such access.

(4) Without limiting paragraph (1), the undertaker may temporarily stop up, alter or divert the streets set out in column (1) of Schedule 3 (streets to be temporarily stopped up) to the extent specified, by reference to the letters and numbers shown on the streets plans, in column (2) of that Schedule.

(5) The undertaker must not temporarily stop up, alter, divert or use as a temporary working site—

- (a) any street referred to in paragraph (4) without first consulting the street authority; and
- (b) any other street or public right of way without the consent of the street authority, which may attach reasonable conditions to the consent.

(6) Any person who suffers loss by the suspension of any private right of way under this article is entitled to compensation to be determined, in case of dispute, under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(7) If a street authority fails to notify the undertaker of its decision within 56 days of receiving an application for consent under paragraph (5)(b) that street authority is deemed to have granted consent.

Stopping up and diversion of public rights of way and access land

11.—(1) The undertaker may, in connection with the carrying out of the authorised project—

(a) Sections 55, 57, 60, 68 and 69 were amended by the Traffic Management Act 2004 (c.18).

- (a) temporarily stop up each of the public rights of way specified in column (1) of Part 1 of Schedule 4 (public rights of way to be stopped up or diverted and access land) to the extent specified in column (2), by reference to the numbers and letters shown on the public rights of way plan;
- (b) permanently divert each of the public rights of way specified in column (1) of Part 2 Schedule 4 (public rights of way to be stopped up or diverted and access land) to the extent specified, in column (2) of that Schedule;
- (c) provide the substitute public rights of way to those diverted as described in column (3) of Part 2 of Schedule 4 (public rights of way to be stopped up or diverted and access land) between the specified terminus points;
- (d) temporarily divert each of the public rights of way specified in column (1) of Part 3 Schedule 4 (public rights of way to be stopped up or diverted and access land) to the extent specified, in column (2) of that Schedule;
- (e) provide the substitute public rights of way to those temporarily diverted for the duration of that diversion as described in column (3) of Part 3 of Schedule 4 (public rights of way to be stopped up or diverted and access land) between the specified terminus points; and
- (f) temporarily stop up, prohibit the use of or restrict the use of the access land specified in column (1) of Part 4 of Schedule 4 (public rights of way to be stopped up or diverted and access land) to the extent specified in column (2), by reference to the area shown on the public rights of way plan.

(2) The rights of access conferred by section 2 of the 2000 Act (rights of the public in relation to access land) are suspended in relation to any access land specified in column (1) of Part 4 of Schedule 4 (public rights of way to be stopped up or diverted and access land) to the extent specified in column (2), by reference to the area shown on the public rights of way plan.

(3) The period of suspension under paragraph (2) lasts for the period of the temporary stopping up.

Access to works

12.—(1) The undertaker may, for the purposes of the authorised project—

- (a) form, lay out and maintain a means of access, or improve or maintain an existing means of access, in the locations specified in columns (1) and (2) of Schedule 5 (access to works); and
- (b) with the approval of the relevant planning authority after consultation with the highway authority in accordance with requirement 11 (highway accesses), form and lay out such other means of access or improve existing means of access, at such locations within the Order limits as the undertaker reasonably requires for the purposes of the authorised project.

(2) If the relevant planning authority fails to notify the undertaker of its decision within 56 days of receiving an application for approval under paragraph (1)(b) that relevant planning authority is deemed to have granted approval.

Agreements with street authorities

13.—(1) A street authority and the undertaker may enter into agreements with respect to—

- (a) any temporary stopping up, alteration or diversion of a street authorised by this Order; or
- (b) the carrying out in the street of any of the works referred to in article 8(1) (street works).

(2) Such agreement may, without prejudice to the generality of paragraph (1)—

- (a) make provision for the street authority to carry out any function under this Order which relates to the street in question;
- (b) include an agreement between the undertaker and street authority specifying a reasonable time for the completion of the works; and

- (c) contain such terms as to payment and otherwise as the parties consider appropriate.

Power to alter layout etc. of streets

14.—(1) Subject to paragraphs (2) and (3), the undertaker may, in so far as may be expedient or necessary for the purposes of or in connection with constructing, operating and maintaining the authorised development alter the layout of any street and, without limitation on the scope of this paragraph, the undertaker may—

- (a) alter the level or increase the width of the street including any kerb, footway, cycle track or verge; and
- (b) make and maintain passing place(s).

(2) The undertaker must restore any street that has been temporarily altered under this article to the reasonable satisfaction of the street authority.

(3) The powers conferred by paragraph (1) must not be exercised without the consent of the street authority.

(4) Paragraphs (2) and (3) do not apply where the undertaker is the street authority for a street in which the works are being carried out.

PART 4

SUPPLEMENTAL POWERS

Discharge of water

15.—(1) Subject to paragraphs (3) and (4) below, the undertaker may use any watercourse or any public sewer, drain or other suitable land for the drainage of water in connection with the carrying out or maintenance of the authorised project and for that purpose may inspect, lay down, take up and alter pipes and may, on any land within the Order limits, make openings into, and connections with, the watercourse, public sewer or drain.

(2) Any dispute arising from the making of connections to or the use of a public sewer or drain by the undertaker pursuant to paragraph (1) is determined as if it were a dispute under section 106 of the Water Industry Act 1991(a) (right to communicate with public sewers).

(3) The undertaker must not discharge any water into any watercourse, public sewer or drain except with the consent of the person to whom it belongs; and such consent may be given subject to such terms and conditions as that person may reasonably impose, but must not be unreasonably withheld.

(4) The undertaker must not carry out any works to any public sewer or drain pursuant to article 15(1) except—

- (a) in accordance with plans approved by the person to whom the sewer or drain belongs, but such approval must not be unreasonably withheld; and
- (b) where that person has been given the opportunity to supervise the making of the opening.

(5) The undertaker must not, in carrying out or maintaining works pursuant to this article damage or interfere with the bed or banks of any watercourse forming part of a main river as defined under section 113(1) of the Water Resources Act 1991(b).

(a) 1991 c.56. Section 106 was amended by section by sections 43(2) and 35(8)(a) of and paragraph 1 of Schedule 2 to the Competition and Service (Utilities) Act 1992 (c.43) and sections 99(2), (4), (5)(a), (5)(b), (5)(c) and 36(2) and 99 of the Water Act 2003 (c.37). There are other amendments to this section which are not relevant to this Order. and section 32, Schedule 3, paragraph 16(1) of the Flood and Water Management Act 2010 c.29.

(b) 1991 c.57.

(6) The undertaker must take such steps as are reasonably practicable to secure that any water discharged into a watercourse or public sewer or drain pursuant to this article is as free as may be practicable from gravel, soil or other solid substance, oil or matter in suspension.

(7) This article does not authorise any water discharge or groundwater activity for which an environmental permit is required by regulation 12 (requirement for an environmental permit) of the Environmental Permitting (England and Wales) Regulations 2016(a).

(8) In this article—

- (a) “public sewer or drain” means a sewer or drain which either belongs to a sewerage undertaker, the Environment Agency, an internal drainage board or a local authority or one which such body has permissive rights over; and
- (b) other expressions, excluding watercourse, used both in this article and in the Environmental Permitting (England and Wales) Regulations 2016 have the same meaning as in those Regulations.

(9) If a person who receives an application for consent or approval fails to notify the undertaker of a decision within 56 days of receiving an application for consent under paragraph (3) or approval under paragraph (4)(a) that person is deemed to have granted consent or given approval, as the case may be.

Protective work to buildings

16.—(1) Subject to the following provisions of this article, the undertaker may at its own expense carry out such protective works to any building lying within the Order limits as the undertaker considers necessary or expedient.

(2) Protective works may be carried out—

- (a) at any time before or during the carrying out in the vicinity of the building of any part of the authorised project; or
- (b) after the completion of that part of the authorised project in the vicinity of the building at any time up to the end of the period of five years beginning with the day on which that part of the authorised project is commissioned.

(3) For the purpose of determining how the powers under this article are to be exercised, the undertaker may enter and survey any building falling within paragraph (1) and any land within its curtilage.

(4) For the purpose of carrying out protective works under this article to a building, the undertaker may (subject to paragraphs (5) and (6))—

- (a) enter the building and any land within its curtilage; and
- (b) where the works cannot be carried out reasonably conveniently without entering land that is adjacent to the building but outside its curtilage, enter the adjacent land (but not any building erected on it).

(5) Before exercising—

- (a) a power under paragraph (1) to carry out protective works to a building;
- (b) a power under paragraph (3) to enter a building and land within its curtilage;
- (c) a power under paragraph (4)(a) to enter a building and land within its curtilage; or
- (d) a power under paragraph (4)(b) to enter land,

the undertaker must, except in the case of emergency, serve on the owners and occupiers of the building or land not less than 14 days’ notice of its intention to exercise the power and, in a case falling within sub-paragraph (a) or (c), specifying the protective works proposed to be carried out.

(6) Where a notice is served under paragraph (5)(a), (c) or (d), the owner or occupier of the building or land concerned may, by serving a counter-notice within the period of 10 days

(a) S.I. 2016/1154.

beginning with the day on which the notice was served, require the question of whether it is necessary or expedient to carry out the protective works or to enter the building or land to be referred to arbitration under article 39 (arbitration).

(7) The undertaker must compensate the owners and occupiers of any building or land in relation to which powers under this article have been exercised for any loss or damage arising to them by reason of the exercise of the powers.

(8) Where—

- (a) protective works are carried out under this article to a building; and
- (b) within the period of five years beginning with the day on which the part of the authorised project carried out in the vicinity of the building is commissioned it appears that the protective works are inadequate to protect the building against damage caused by the carrying out or use of that part of the authorised project,

the undertaker must compensate the owners and occupiers of the building for any loss or damage sustained by them.

(9) Nothing in this article relieves the undertaker from any liability to pay compensation under section 152 of the 2008 Act (compensation in case where no right to claim in nuisance).

(10) Any compensation payable under paragraph (7) or (8) must be determined, in case of dispute, under Part 1 of the 1961 Act (determination of questions of disputed compensation).

(11) Section 13 (refusal to give possession to acquiring authority) of the 1965 Act applies to the entry onto, or possession of land under this article to the same extent as it applies to the compulsory acquisition of land under this Order by virtue of section 125 (application of compulsory acquisition provisions) of the 2008 Act.

(12) In this article “protective works”, in relation to a building, means—

- (a) underpinning, strengthening and any other works the purpose of which is to prevent damage that may be caused to the building by the carrying out, maintenance or use of the authorised project; and
- (b) any works the purpose of which is to remedy any damage that has been caused to the building by the carrying out, maintenance or use of the authorised project.

Authority to survey and investigate the land onshore

17.—(1) The undertaker may for the purposes of this Order enter on any land shown within the Order limits or any land which may be affected by the authorised project and—

- (a) survey or investigate the land;
- (b) without prejudice to the generality of sub-paragraph (a), make trial holes or bore holes in such positions on the land as the undertaker thinks fit to investigate the nature of the surface layer, subsoil and groundwater and remove soil and groundwater samples;
- (c) without prejudice to the generality of sub-paragraph (a), carry out ecological or archaeological investigations on such land, including the digging of trenches; and
- (d) place on, leave on and remove from the land apparatus for use in connection with the survey and investigation of land and making of trial holes, bore holes or trenches.

(2) No land may be entered or equipment placed or left on or removed from the land under paragraph (1) unless at least 14 days’ notice has been served on every owner and occupier of the land.

(3) Any person entering land under this article on behalf of the undertaker—

- (a) must, if so required on entering the land, produce written evidence of their authority to do so; and
- (b) may take with them such vehicles and equipment as are necessary to carry out the survey or investigation or to make the trial holes, bore holes or trenches.

(4) No trial holes, bore holes or trenches may be made under this article—

- (a) in land forming a railway without the consent of Network Rail^(a);
- (b) in land held by or in right of the Crown without the consent of the Crown;
- (c) in land located within the highway boundary without the consent of the highway authority; or
- (d) in a private street without the consent of the street authority,

but such consent must not be unreasonably withheld or delayed.

(5) The undertaker must compensate the owners and occupiers of the land for any loss or damage arising by reason of the exercise of the authority conferred by this article, such compensation to be determined, in case of dispute, under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(6) If either a highway authority or a street authority which receives an application for consent fails to notify the undertaker of its decision within 56 days of receiving the application for consent—

- (a) under paragraph (4)(c) in the case of a highway authority; or
- (b) under paragraph (4)(d) in the case of a street authority;

that authority is deemed to have granted consent.

(7) Section 13 (refusal to give possession to acquiring authority) of the 1965 Act applies to the entry onto, or possession of land under this article to the same extent as it applies to the compulsory acquisition of land under this Order by virtue of section 125 (application of compulsory acquisition provisions) of the 2008 Act.

PART 5

POWERS OF ACQUISITION

Compulsory acquisition of land

18.—(1) The undertaker may acquire compulsorily so much of the Order land as is required for the authorised project, or to facilitate it, or as is incidental to it.

(2) This article is subject to paragraph (2) of article 21 (compulsory acquisition of rights etc.) and article 28 (temporary use of land for carrying out the authorised project).

Compulsory acquisition of land: minerals

19. Parts 2 and 3 of Schedule 2 (minerals) to the Acquisition of Land Act 1981 are incorporated in this Order, subject to the following modifications—

- (a) for “acquiring authority” substitute “undertaker”; and
- (b) for “undertaking” substitute “authorised project”.

Time limit for exercise of authority to acquire land compulsorily

20.—(1) After the end of the period of seven years beginning on the day on which this Order is made—

- (a) no notice to treat is to be served under Part 1 (determination of questions of disputed compensation) of the 1965 Act; and
- (b) no declaration is to be executed under section 4 (execution of declaration) of the 1981 Act as applied by article 23 (application of the Compulsory Purchase (Vesting Declarations) Act 1981).

(a) As defined in Part 5 of Schedule 9 (Protection for Network Rail Infrastructure Limited).

(2) The authority conferred by article 28 (temporary use of land for carrying out the authorised project) ceases at the end of the period referred to in paragraph (1), except that nothing in this paragraph prevents the undertaker remaining in possession of land after the end of that period, if the land was entered and possession was taken before the end of that period.

Compulsory acquisition of rights etc.

21.—(1) Subject to paragraph (2), the undertaker may acquire compulsorily such rights over the Order land or impose such restrictive covenants affecting the Order land as may be required for any purpose for which that land may be acquired under article 18 (compulsory acquisition of land), by creating them as well as by acquiring rights already in existence.

(2) Subject to the provisions of this paragraph, article 22 (private rights) and article 30 (statutory undertakers), in the case of the Order land specified in column (1) of Schedule 6 (land in which only new rights etc. may be acquired) the undertaker's powers of compulsory acquisition are limited to the acquisition of existing rights over land and the creation and acquisition of the new rights and the imposition of restrictive covenants for the purpose specified in relation to that land in column (2) of that Schedule.

(3) Subject to section 8 (other provisions as to divided land) of the 1965 Act, and Schedule 2A (counter-notice requiring purchase of land not in notice to treat) as substituted by paragraph 10 of Schedule 7 (modification of compensation and compulsory purchase enactments for creation of new rights), where the undertaker creates a new interest or acquires an existing right over land or imposes a restrictive covenant under paragraph (1) or (2), the undertaker is not required to acquire a greater interest in that land.

(4) Schedule 7 (modification of compensation and compulsory purchase enactments for creation of new rights) has effect for the purpose of modifying the enactments relating to compensation and the provisions of the 1965 Act in their application in relation to the compulsory acquisition under this article of a right over land by the creation of a new right or the imposition of a restrictive covenant.

(5) In any case where the acquisition of new rights or imposition of a restriction under paragraph (1) or (2) is required for the purpose of diverting, replacing or protecting apparatus of a statutory undertaker, the undertaker may, with the consent of the Secretary of State, transfer the power to acquire such rights and impose such restrictions to the statutory undertaker in question.

(6) The exercise by a statutory undertaker of any power in accordance with a transfer under paragraph (5) is subject to the same restrictions, liabilities and obligations as would apply under this Order if that power were exercised by the undertaker.

(7) Subject to the modifications set out in Schedule 7 the enactments for the time being in force with respect to compensation for the compulsory purchase of land are to apply in the case of a compulsory acquisition under this Order in respect of a right by the creation of a new right or imposition of a restriction as they apply to the compulsory purchase of land and interests in land.

(8) So much of the special category land as is required for the purposes of exercising the powers acquired by the undertaker pursuant to this article is discharged from all rights, trusts and incidents to which it was previously subject, so far as their continuance would be inconsistent with the exercise of those rights.

Private Rights

22.—(1) Subject to the provisions of this article, all private rights and restrictions over land subject to compulsory acquisition under this Order are extinguished—

- (a) as from the date of acquisition of the land, or of the right, or of the benefit of the restriction by the undertaker, whether compulsorily, by agreement or through the grant of a lease of the land by agreement; or
- (b) on the date of entry on the land by the undertaker under section 11(1) of the 1965 Act (power of entry),

whichever is the earliest.

(2) Subject to the provisions of this article, all private rights and restrictions over land subject to the compulsory acquisition of rights or the imposition of restrictions under this Order are suspended and unenforceable or, where so notified by the undertaker, extinguished in so far as their continuance would be inconsistent with the exercise of the right or compliance with the restriction—

- (a) as from the date of the acquisition of the right or the imposition of the restriction by the undertaker (whether the right is acquired compulsorily, by agreement or through the grant of a lease of the land by agreement); or
- (b) on the date of entry on the land by the undertaker under section 11(1) of the 1965 Act (powers of entry) in pursuance of the right,

whichever is the earliest.

(3) Subject to the provisions of this article, all private rights or restrictions over land of which the undertaker takes temporary possession under this Order are suspended and unenforceable, in so far as their continuance would be inconsistent with the purpose for which temporary possession is taken, for as long as the undertaker remains in lawful possession of the land.

(4) Subject to the provisions of this article, all private rights over any part of the Order land that is owned by, vested in or acquired by the undertaker are extinguished on commencement of any activity authorised by this Order which interferes with or breaches those rights and where the undertaker gives notice of such extinguishment.

(5) Any person who suffers loss by the extinguishment or suspension of any private right or restriction under this article is entitled to compensation to be determined, in case of dispute, under Part 1 of the 1961 Act (determination of questions of disputed compensation).

(6) This article does not apply in relation to any right to which section 138 of the 2008 Act (extinguishment of rights, and removal of apparatus, of statutory undertakers etc.) or article 30 (statutory undertakers) applies.

(7) Paragraphs (1) to (3) have effect subject to—

- (a) any notice given by the undertaker before—
 - (i) the completion of the acquisition of the land or the acquisition of rights or the imposition of restrictions over or affecting the land;
 - (ii) the undertaker's appropriation of the land;
 - (iii) the undertaker's entry onto the land; or
 - (iv) the undertaker's taking temporary possession of the land,that any or all of those paragraphs do not apply to any right or restriction specified in the notice; or
- (b) any agreement made at any time between the undertaker and the person in or to whom the right or restriction in question is vested, belongs or benefits.

(8) If an agreement referred to in paragraph (7)(b)—

- (a) is made with a person in or to whom the right or restriction is vested, belongs or benefits; and
- (b) is expressed to have effect also for the benefit of those deriving title from or under that person,

the agreement is effective in respect of the persons so deriving title, whether the title was derived before or after the making of the agreement.

(9) Reference in this article to private rights over land includes any right of way, trust, incident, easement, liberty, privilege, right or advantage annexed to land and adversely affecting other land, including any natural right to support and include restrictions as to the user of land arising by virtue of a contract, agreement or undertaking having that effect.

Application of the Compulsory Purchase (Vesting Declarations) Act 1981

23.—(1) The 1981 Act applies as if this Order were a compulsory purchase order.

- (2) The 1981 Act, as applied by paragraph (1), has effect with the following modifications.
- (3) In section 1 (application of act), for subsection 2 substitute—
- “(2) This section applies to any Minister, any local or other public authority or any other body or person authorised to acquire land by means of a compulsory purchase order.”.
- (4) In Section 5(2) (earliest date for execution of declaration) omit the words from “and this subsection” to the end.
- (5) Section 5A (time limit for general vesting declaration) is omitted(a).
- (6) In section 5B (extension of time limit during challenge)(b) for “section 23 of the Acquisition of Land Act 1981 (application to High Court in respect of compulsory purchase order” substitute “section 118 of the 2008 Act (legal challenges relating to applications for orders granting development consent) the seven year period mentioned in article 20 (time limit for exercise of authority to acquire land compulsorily) of the Hornsea Four Offshore Wind Farm Order 202[]”.
- (7) In section 6 (notices after execution of declaration), in subsection (1)(b) for “section 15 of, or paragraph 6 of Schedule 1 to, the Acquisition of Land Act 1981” substitute “section 134 (notice of authorisation of compulsory acquisition) of the Planning Act 2008”.
- (8) In section 7 (constructive notice to treat), in subsection (1)(a), omit the words “(as modified by section 4 of the Acquisition of Land Act 1981)”.
- (9) In Schedule A1 (counter-notice requiring purchase of land not in general vesting declaration)(c), for paragraph 1(2) substitute—
- “(2) But see article 25(1) (acquisition of subsoil only) of the Hornsea Four Offshore Wind Farm Order 202[], which excludes the acquisition of subsoil only from this Schedule.”.
- (10) References to the 1965 Act in the 1981 Act must be construed as references to the 1965 Act as applied by section 125 (application of compulsory acquisition provisions) of the 2008 Act (and as modified by article 26 (modification of Part 1 of the Compulsory Purchase Act 1965) to the compulsory acquisition of land under this Order.

Statutory authority to override easements and other rights

24.—(1) The carrying out or use of the authorised development and the doing of anything else authorised by this Order is authorised for the purpose specified in section 158(2) of the 2008 Act (nuisance: statutory authority), notwithstanding that it involves—

- (a) an interference with an interest or right to which this article applies; or
- (b) a breach of a restriction as to use of land arising by virtue of contract.

(2) The undertaker must pay compensation to any person whose land is injuriously affected by—

- (a) an interference with an interest or right to which this article applies; or
- (b) a breach of a restriction as to use of land arising by virtue of contract,

authorised by virtue of this Order and the operation of section 158 (nuisance: statutory authority) of the 2008 Act.

(3) The interests and rights to which this article applies are any easement, liberty, privilege, right or advantage annexed to land and adversely affecting other land, including any natural right to support and any restrictions as to the use of land arising by virtue of a contract.

(4) Subsection (2) of section 10 (further provision as to compensation for injurious affection) of the 1965 Act applies to paragraph (2) by virtue of section 152(5) of the 2008 Act (compensation in case where no right to claim in nuisance).

(5) Any rule or principle applied to the construction of section 10 of the 1965 Act must be applied to the construction of paragraph (2) (with any necessary modifications).

(a) Section 5A to the 1981 Act was inserted by section 182(2) of the Housing and Planning Act 2016 (c.22).

(b) Inserted by section 202(2) of the Housing and Planning Act 2016 (c.22).

(c) Inserted by paragraph 6 of Schedule 18 to the Housing and Planning Act 2016 (c.22).

Acquisition of subsoil only

25.—(1) The undertaker may acquire compulsorily so much of, or such rights in, the subsoil of the land referred to in paragraph (1) of article 18 (compulsory acquisition of land etc.) or article 21 (compulsory acquisition of rights) as may be required for any purpose for which that land may be acquired under that provision instead of acquiring the whole of the land.

(2) Where the undertaker acquires any part of, or rights in, the subsoil of land under paragraph (1), the undertaker is not required to acquire an interest in any other part of the land.

(3) The following do not apply in connection with the exercise of the power under paragraph (1) in relation to subsoil only—

- (a) Schedule 2A (counter-notice requiring purchase of land not in notice to treat) to the 1965 Act;
- (b) Schedule A1 (counter-notice requiring purchase of land not in general vesting declaration) to the 1981 Act; and
- (c) Section 153(4A) (blighted land: proposed acquisition of part interest; material detriment test) of the Town and Country Planning Act 1990.

(4) Paragraphs (2) and (3) are to be disregarded where the undertaker acquires a cellar, vault, arch or other construction forming part of a house, building or manufactory.

Modification of Part 1 of the Compulsory Purchase Act 1965

26.—(1) Part 1 (compulsory purchase under Acquisition of Land Act of 1946) of the 1965 Act, as applied to this Order by section 125 (application of compulsory acquisition provisions) of the 2008 Act, is modified as follows.

(2) In section 4A(1) (extension of time limit during challenge)(a)—

- (a) for “section 23 of the Acquisition of Land Act 1981 (application to High Court in respect of compulsory purchase order), the three year period mentioned in section 4” substitute “section 118 of the 2008 Act (legal challenges relating to applications for orders granting development consent)”; and
- (b) for “the three year period specified in section 4” substitute “the seven year period mentioned in article 20 (time limit for exercise of authority to acquire land compulsorily) of the Hornsea Four Offshore Wind Farm Order 202[]”.

(3) In section 11A (powers of entry: further notices of entry)(b)—

- (a) in subsection (1)(a), after “land” insert “under that provision”; and
- (b) in subsection (2), after “land” insert “under that provision”.

(4) In section 22(2) (expiry of time limit for exercise of compulsory purchase power not to affect acquisition of interests omitted from purchase), for “section 4 of this Act” substitute “article 20 (time limit for exercise of authority to acquire land compulsorily) of the Hornsea Four Offshore Wind Farm Order 202[]”.

(5) In Schedule 2A (counter-notice requiring purchase of land not in notice to treat)(c)—

- (a) for paragraphs 1(2) and 14(2) substitute—
“(2) But see article 25(3) (acquisition of subsoil only) of the Hornsea Four Offshore Wind Farm Order 202[], which excludes the acquisition of subsoil only from this Schedule.”; and
- (b) at the end insert—

(a) Inserted by section 202(1) of the Housing and Planning Act 2016 (c.22).

(b) Inserted by section 186(3) of the Housing and Planning Act 2016 (c.22).

(c) Inserted by schedule 17(1) paragraph 3 to the Housing and Planning Act 2016 (c.22).

“PART 4

INTERPRETATION

30. In this Schedule, references to entering on and taking possession of land do not include doing so under article 16 (protective work to buildings), article 28 (temporary use of land for carrying out the authorised project) or article 29 (temporary use of land for maintaining the authorised project) of the Hornsea Four Offshore Wind Farm Order 202[].”

Rights under or over streets

27.—(1) The undertaker may enter on and appropriate so much of the subsoil of or air-space over any street within the Order limits as may be required for the purposes of the authorised project and may use the subsoil or air-space for those purposes or any other purpose ancillary to the authorised project.

(2) Subject to paragraph (3), the undertaker may exercise any power conferred by paragraph (1) in relation to a street without being required to acquire any part of the street or any easement or right in the street.

(3) Paragraph (2) does not apply in relation to—

- (a) any subway or underground building; or
- (b) any cellar, vault, arch or other construction in, on or under a street which forms part of a building fronting onto the street.

(4) Subject to paragraph (5), any person who is an owner or occupier of land appropriated under paragraph (1) without the undertaker acquiring any part of that person’s interest in the land, and who suffers loss as a result, is entitled to compensation to be determined, in case of dispute, under Part 1 of the 1961 Act.

(5) Compensation is not payable under paragraph (4) to any person who is an undertaker to whom section 85 of the 1991 Act (sharing cost of necessary measures) applies in respect of measures of which the allowable costs are to be borne in accordance with that section.

Temporary use of land for carrying out the authorised project

28.—(1) The undertaker may, in connection with the carrying out of the authorised project—

- (a) enter on and take temporary possession of—
 - (i) the land specified in columns (1) and (2) of Schedule 8 (land of which temporary possession may be taken) for the purpose specified in relation to that land in column (3) of that Schedule; and
 - (ii) any other Order land in respect of which no notice of entry has been served under section 11 of the 1965 Act (other than in connection with the acquisition of rights only) and no declaration has been made under section 4 of the 1981 Act;
- (b) remove any buildings, agricultural plant and apparatus, drainage, fences, debris and vegetation from that land;
- (c) construct temporary works (including the provision of means of access and footpaths), haul roads, security fencing, bridges, services, signage, structures and buildings on that land;
- (d) use the land for the purposes of a working site with access to the working site in connection with the authorised project;
- (e) construct any works, or use the land, as specified in relation to that land in column 3 of Schedule 8 (land of which temporary possession may be taken), or any mitigation works;
- (f) construct such works on that land as are mentioned in Part 1 of Schedule 1 (authorised development); and

(g) carry out mitigation works required pursuant to the requirements in Part 3 of Schedule 1 (authorised development).

(2) Not less than 14 days before entering on and taking temporary possession of land under this article the undertaker must serve notice of the intended entry on the owners and occupiers of the land.

(3) The undertaker must not remain in possession of any land under this article for longer than reasonably necessary and in any event must not, without the agreement of the owners of the land, remain in possession of any land under this article—

(a) in the case of land specified in paragraph (1)(a)(i) after the end of the period of one year beginning with the date of completion of the part of the authorised project specified in relation to that land in column (3) of Schedule 8 (land of which temporary possession may be taken); or

(b) in the case of land specified in paragraph (1)(a)(ii) after the end of the period of one year beginning with the date of completion of the part of the authorised project for which temporary possession of the land was taken unless the undertaker has, before the end of that period, served a notice of entry under section 11 of the 1965 Act or made a declaration under section 4 of the 1981 Act in relation to that land.

(4) Unless the undertaker has served notice of entry under section 11 of the 1965 Act or made a declaration under section 4 of the 1981 Act or otherwise acquired the land or rights over land subject to temporary possession or otherwise agreed with the owners of the land, the undertaker must before giving up possession of land of which temporary possession has been taken under this article, remove all temporary works and restore the land to the reasonable satisfaction of the owners of the land; but the undertaker is not required to—

(a) replace any building, structure, drain or electric line removed under this article;

(b) remove any drainage works installed by the undertaker under this article;

(c) remove any new road surface or other improvements carried out under this article to any street specified in Schedule 2 (streets subject to street works) or any new footpath surface or other enhancements carried out under this article to any footpath or any improvements carried out under this article to any bridge;

(d) remove any fencing or boundary treatments installed by the undertaker under this article to replace or enhance existing fencing or boundary treatments; or

(e) restore the land on which any works have been carried out under paragraph (1)(g) insofar as the works relate to mitigation works identified in the environmental statement or required pursuant to the requirements in Schedule 1.

(5) The undertaker must pay compensation to the owners and occupiers of land which temporary possession is taken under this article for any loss or damage arising from the exercise in relation to the land of the provisions of any power conferred by this article.

(6) Any dispute as to a person's entitlement to compensation under paragraph (5), or as to the amount of the compensation, must be determined under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(7) Nothing in this article affects any liability to pay compensation under section 152 of the 2008 Act (compensation in case where no right to claim in nuisance) or under any other enactment in respect of loss or damage arising from the carrying out of the authorised project, other than loss or damage for which compensation is payable under paragraph (5).

(8) The undertaker may not compulsorily acquire under this Order the land referred to in paragraph (1)(a)(i) except that the undertaker is not precluded from—

(a) acquiring new rights or imposing restrictive covenants over any part of that land under article 21 (compulsory acquisition of rights etc.) to the extent that such land is listed in column (1) of Schedule 6; or

(b) acquiring any part of the subsoil (or rights in the subsoil) of that land under article 25 (acquisition of subsoil only).

(9) Where the undertaker takes possession of land under this article, the undertaker is not required to acquire the land or any interest in it.

(10) Section 13 of the 1965 Act (refusal to give possession to acquiring authority) applies to the temporary use of land pursuant to this article to the same extent as it applies to the compulsory acquisition of land under this Order by virtue of section 125 of the 2008 Act (application of compulsory acquisition provisions).

(11) Nothing in this article prevents the taking of temporary possession more than once in relation to any land specified in Schedule 8.

(12) So much of the special category land as is required for the purposes of exercising the powers pursuant to this article is temporarily discharged from all rights, trusts and incidents to which it was previously subject, so far as their continuance would be inconsistent with the exercise of those powers, and only for such time as any special category land is being used under this article.

(13) At any time where the undertaker has taken temporary possession of any part of the Driffield Navigation under this article, on the commencement date specified in the notice given under paragraph (15) and for the duration specified in notice given under paragraph (15), the public right of navigation over that part of the Driffield Navigation is suspended and unenforceable against the Driffield Navigation Trust.

(14) Any person who suffers loss as a result of the suspension of any private right of navigation over the Driffield Navigation under this article is entitled to be paid compensation for such loss by the undertaker, to be determined, in case of dispute, under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(15) Not later than 28 days prior to the proposed commencement of any suspension of the public right of navigation over the Driffield Navigation under this article, the undertaker must give written notice to The Driffield Navigation Trust except in the case of an emergency when the undertaker must give such notice as is reasonably practicable.

(16) A notice given under paragraph (15) must provide details of the proposed suspension including particulars of the—

- (a) commencement date;
- (b) duration; and
- (c) affected area.

(17) Following receipt of a notice given under paragraph (15), The Driffield Navigation Trust must issue a notice to mariners within 14 days, giving the commencement date and other particulars of the suspension to which the notice relates, and that suspension will take effect on the date specified and as otherwise described in the notice.

Temporary use of land for maintaining the authorised project

29.—(1) Subject to paragraph (2), at any time during the maintenance period relating to any part of the authorised project, the undertaker may—

- (a) enter on and take temporary possession of any of the Order land if such possession is reasonably required for the purpose of maintaining the authorised project;
- (b) enter on any of the Order land for the purpose of gaining such access as is reasonably required for the purpose of maintaining the authorised development; and
- (c) construct such temporary works (including the provision of means of access) and buildings on the land as may be reasonably necessary for that purpose.

(2) Paragraph (1) does not authorise the undertaker to take temporary possession of—

- (a) any house or garden belonging to a house; or
- (b) any building (other than a house) if it is for the time being occupied.

(3) Not less than 28 days before entering on and taking temporary possession of land under this article the undertaker must serve notice of the intended entry on the owners and occupiers of the land.

(4) The undertaker may only remain in possession of land under this article for so long as may be reasonably necessary to carry out the maintenance of the part of the authorised project for which possession of the land was taken.

(5) Before giving up possession of land of which temporary possession has been taken under this article, the undertaker must remove all temporary works and restore the land to the reasonable satisfaction of the owners of the land.

(6) The undertaker must pay compensation to the owners and occupiers of land of which temporary possession is taken under this article for any loss or damage arising from the exercise in relation to the land of the provisions of this article.

(7) Any dispute as to a person's entitlement to compensation under paragraph (6), or as to the amount of the compensation, must be determined under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(8) Nothing in this article affects any liability to pay compensation under section 152 (compensation in case where no right to claim in nuisance) of the 2008 Act or under any other enactment in respect of loss or damage arising from the maintenance of the authorised project, other than loss or damage for which compensation is payable under paragraph (6).

(9) Where the undertaker takes possession of land under this article, the undertaker is not required to acquire the land or any interest in it.

(10) Section 13 of the 1965 Act (refusal to give possession to acquiring authority) applies to the temporary use of land pursuant to this article to the same extent as it applies to the compulsory acquisition of land under this Order by virtue of section 125 of the 2008 Act (application of compulsory acquisition provisions).

(11) In this article "the maintenance period" means the period of 5 years beginning with the date on which the authorised project first exports electricity to the national electricity transmission network, unless a different maintenance period is stated in the landscape management plan approved under requirement 8 or in the code of construction practice approved under requirement 18.

(12) So much of the special category land as is required for the purposes of exercising the powers pursuant to this article is temporarily discharged from all rights, trusts and incidents to which it was previously subject, so far as their continuance would be inconsistent with the exercise of those powers, and only for such time as any special category land is being used under this article.

(13) At any time where the undertaker has taken temporary possession of any part of the Driffield Navigation under this article, on the commencement date specified in the notice given under paragraph (15) and for the duration specified in notice given under paragraph (15), the public right of navigation over that part of the Driffield Navigation is suspended and unenforceable against the Driffield Navigation Trust.

(14) Any person who suffers loss as a result of the suspension of any private right of navigation over the Driffield Navigation under this article is entitled to be paid compensation for such loss by the undertaker, to be determined, in case of dispute, under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(15) Not later than 28 days prior to the proposed commencement of any suspension of the public right of navigation over the Driffield Navigation under this article, the undertaker must give written notice to the Driffield Navigation Trust except in the case of an emergency when the undertaker must give such notice as is reasonably practicable.

(16) A notice given under paragraph (15) must provide details of the proposed suspension including particulars of the—

- (a) commencement date;
- (b) duration; and

(c) affected area.

(17) Following receipt of a notice given under paragraph (15), the Driffield Navigation Trust must issue a notice to mariners within 14 days, giving the commencement date and other particulars of the suspension to which the notice relates, and that suspension will take effect on the date specified and as otherwise described in the notice.

Statutory undertakers

30. Subject to the provisions of Schedule 9 (protective provisions) the undertaker may—

- (a) acquire compulsorily, or acquire new rights or impose restrictive covenants over, the land belonging to statutory undertakers shown on the land plans within the Order land; and
- (b) extinguish or suspend the rights of, or restrictions for the benefit of, or remove, relocate or reposition the apparatus belonging to statutory undertakers over or within the Order land.

Recovery of costs of new connections

31.—(1) Where any apparatus of a public utility undertaker or of a public communications provider is removed under article 30 (statutory undertakers) any person who is the owner or occupier of premises to which a supply was given from that apparatus is entitled to recover from the undertaker compensation in respect of expenditure reasonably incurred by that person, in consequence of the removal, for the purpose of effecting a connection between the premises and any other apparatus from which a supply is given.

(2) Paragraph (1) does not apply in the case of the removal of a public sewer but where such a sewer is removed under article 30 (statutory undertakers), any person who is—

- (a) the owner or occupier of premises the drains of which communicated with that sewer; or
- (b) the owner of a private sewer which communicated with that sewer,

is entitled to recover from the undertaker compensation in respect of expenditure reasonably incurred by that person, in consequence of the removal, for the purpose of making the drain or sewer belonging to that person communicate with any other public sewer or with a private sewerage disposal plant.

(3) This article does not have effect in relation to apparatus to which Part 3 (street works in England and Wales) of the 1991 Act applies.

(4) In this paragraph—

“public communications provider” has the same meaning as in section 151(1) of the 2003 Act; and

“public utility undertaker” has the same meaning as in the 1980 Act.

PART 6 OPERATIONS

Operation of generating station

32.—(1) The undertaker is authorised to operate the generating station comprised in the authorised project.

(2) This article does not relieve the undertaker of any requirement to obtain any permit or licence under any other legislation that may be required from time to time to authorise the operation of an electricity generating station.

Deemed marine licences under the 2009 Act

33. The deemed marine licences set out in Schedules 11 (deemed marine licence under the 2009 Act — generation assets) and 12 (deemed marine licence under the 2009 Act — transmission assets) respectively, are deemed to be granted to the undertaker under Part 4 of the 2009 Act for the licensed marine activities set out in Part 1, and subject to the conditions set out in Part 2 of each of those Schedules.

PART 7

MISCELLANEOUS AND GENERAL

Application of landlord and tenant law

34.—(1) This article applies to—

- (a) any agreement for leasing to any person the whole or any part of the authorised project or the right to operate the same; and
- (b) any agreement entered into by the undertaker with any person for the construction, maintenance, use or operation of the authorised project, or any part of it,

so far as any such agreement relates to the terms on which any land which is the subject of a lease granted by or under that agreement is to be provided for that person's use.

(2) No enactment or rule of law regulating the rights and obligations of landlords and tenants prejudices the operation of any agreement to which this article applies.

(3) Accordingly, no such enactment or rule of law applies in relation to the rights and obligations of the parties to any lease granted by or under any such agreement so as to—

- (a) exclude or in any respect modify any of the rights and obligations of those parties under the terms of the lease, whether with respect to the termination of the tenancy or any other matter;
- (b) confer or impose on any such party any right or obligation arising out of or connected with anything done or omitted on or in relation to land which is the subject of the lease, in addition to any such right or obligation provided for by the terms of the lease; or
- (c) restrict the enforcement (whether by action for damages or otherwise) by any party to the lease of any obligation of any other party under the lease.

Operational land for purposes of the 1990 Act

35. Development consent granted by this Order is treated as specific planning permission for the purposes of section 264(3)(a) of the 1990 Act (cases in which land is to be treated as not being operational land).

Felling or lopping of trees and removal of hedgerows

36.—(1) Subject to article 37 (trees subject to tree preservation orders) the undertaker may fell or lop or cut back the roots of any tree or shrub within or overhanging land within the Order limits or near any part of the authorised project, or cut back its roots, if the undertaker reasonably believes it to be necessary to do so to prevent the tree or shrub from obstructing or interfering with onshore site preparation works, the construction, maintenance or operation of the authorised project or any apparatus used in connection with the authorised project.

(2) The undertaker may, for the purpose of the authorised project—

- (a) remove any hedgerows within the Order limits and specified in Schedule 10, Part 1 (removal of hedgerows) that may be required for the purposes of carrying out the authorised project; and

(b) remove the important hedgerows as are within the Order limits and specified in Schedule 10, Part 2 (removal of important hedgerows).

(3) In carrying out any activity authorised by paragraph (1), the undertaker must not do any unnecessary damage to any tree or shrub and must pay compensation to any person for any loss or damage arising from such activity.

(4) Any dispute as to a person's entitlement to compensation under paragraph (3), or as to the amount of compensation, must be determined under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

(5) In this article "hedgerow" and "important hedgerow" have the same meaning as in the Hedgerows Regulations 1997(a).

Trees subject to tree preservation orders

37.—(1) The undertaker may fell or lop or cut back the roots of any tree within or overhanging land within the Order limits subject to a tree preservation order as specified on the tree preservation order and hedgerow plan, if it reasonably believes it to be necessary to do so in order to prevent the tree from obstructing or interfering with onshore site preparation works the construction, maintenance or operation of the authorised project or any apparatus used in connection with the authorised project.

(2) In carrying out any activity authorised by paragraph (1)—

(a) the undertaker must do no unnecessary damage to any tree and must pay compensation to any person for any loss or damage arising from such activity; and

(b) the duty contained in section 206(1) (replacement of trees) of the 1990 Act will not apply.

(3) The authority given by paragraph (1) will constitute a deemed consent under the relevant tree preservation order.

(4) Any dispute as to a person's entitlement to compensation under paragraph (2), or as to the amount of compensation, will be determined under Part 1 (determination of questions of disputed compensation) of the 1961 Act.

Certification of plans and documents, etc.

38.—(1) The undertaker must, as soon as practicable after the making of this Order, submit to the Secretary of State copies of the documents listed in Schedule 15 (documents to be certified) for certification that they are true copies of the documents referred to in this Order.

(2) A plan or document so certified is admissible in any proceedings as evidence of the contents of the document of which it is a copy.

(3) Where a plan or document certified under paragraph (1)—

(a) refers to a provision of this Order (including any specified requirement) when it was in draft form; and

(b) identifies that provision by number, or combination of numbers and letters, which is different from the number, or combination of numbers and letters by which the corresponding provision of this Order is identified in this Order as made;

the reference in the plan or document concerned must be construed for the purposes of this Order as referring to the provision (if any) corresponding to that provision in this Order as made.

Arbitration

39.—(1) Subject to article 42 (saving provisions for Trinity House), any difference under any provision of this Order, unless otherwise provided for, must be referred to and settled in arbitration in accordance with the rules at Schedule 14 of this Order, by a single arbitrator to be agreed upon

(a) S.I. 1997/1160.

by the parties, within 14 days of receipt of the notice of arbitration, or if the parties fail to agree within the time period stipulated, to be appointed on application of either party (after giving written notice to the other) by the Secretary of State.

(2) For the avoidance of doubt, any matter for which the consent or approval of the Secretary of State or the Marine Management Organisation is required under any provision of this Order will not be subject to arbitration.

Requirements, appeals, etc.

40.—(1) Where an application is made to, or a request is made of, the relevant planning authority or any other relevant person for any agreement or approval required or contemplated by any of the provisions of this Order, such agreement or approval must, if given, be given in writing and must not be unreasonably withheld or delayed.

(2) Part 4 of Schedule 1 (procedure for discharge of requirements) has effect in relation to all agreements or approvals granted, refused or withheld in relation to requirements included in Part 3 of that Schedule.

Abatement of works abandoned or decayed

41. Where any of Work Nos. 1, 2, 3 or 5 or all of them or any part of them, is abandoned or allowed to fall into decay the Secretary of State may, following consultation with the undertaker, issue a written notice requiring the undertaker at its own expense either to repair, make safe and restore one or any of those Works, or any relevant part of them, or to remove them or any relevant part and, without prejudice to any notice served under section 105(2) of the 2004 Act^(a) restore the site to a safe and proper condition, to such an extent and within such limits as may be specified in the notice.

Saving provisions for Trinity House

42. Nothing in this Order prejudices or derogates from any of the rights, duties or privileges of Trinity House.

Crown rights

43.—(1) Nothing in this Order affects prejudicially any estate, right, power, privilege, authority or exemption of the Crown and in particular, nothing in this Order authorises the undertaker or any lessee or licensee to take, use, enter upon or in any manner interfere with any land or rights of any description (including any portion of the shore or bed of the sea or any river, channel, creek, bay or estuary)—

- (a) belonging to Her Majesty in right of the Crown and forming part of The Crown Estate without the consent in writing of the Crown Estate Commissioners;
- (b) belonging to Her Majesty in right of the Crown and not forming part of The Crown Estate without the consent in writing of the government department having the management of that land; or
- (c) belonging to a government department or held in trust for Her Majesty for the purposes of a government department without the consent in writing of that government department.

(2) Paragraph (1) does not apply to the exercise of any right under this Order for the compulsory acquisition of an interest in any Crown land (as defined in the 2008 Act) which is for the time being held otherwise than by or on behalf of the Crown.

(3) A consent under paragraph (1) may be given unconditionally or subject to terms and conditions; and is deemed to have been given in writing where it is sent electronically.

(a) Section 105(2) was substituted by section 69(3) of the Energy Act 2008 (c.32).

Protective provisions

44. Schedule 9 (protective provisions) has effect.

Funding

45.—(1) The undertaker must not exercise the powers conferred by the provisions referred to in paragraph (2) in relation to any land unless it has first put in place either—

- (a) a guarantee and the amount of that guarantee approved by the Secretary of State in respect of the liabilities of the undertaker to pay compensation under this Order in respect of the exercise of the relevant power in relation to that land; or
- (b) an alternative form of security and the amount of that security for that purpose approved by the Secretary of State in respect of the liabilities of the undertaker to pay compensation under this Order in respect of the exercise of the relevant power in relation to that land.

(2) The provisions are—

- (a) article 18 (compulsory acquisition of land);
- (b) article 21 (compulsory acquisition of rights etc.);
- (c) article 22 (private rights);
- (d) article 25 (acquisition of subsoil only);
- (e) article 27 (rights under or over streets);
- (f) article 28 (temporary use of land for carrying out the authorised project);
- (g) article 29 (temporary use of land for maintaining the authorised project); and
- (h) article 30 (statutory undertakers).

(3) A guarantee or alternative form of security given in respect of any liability of the undertaker to pay compensation under this Order is to be treated as enforceable against the guarantor or person providing the alternative form of security by any person to whom such compensation is payable and must be in such a form as to be capable of enforcement by such a person.

(4) Nothing in this article requires a guarantee or alternative form of security to be in place for more than 15 years after the date on which the relevant power is exercised.

Amendment and modification of statutory provisions

46. The Dogger Bank Creyke Beck Offshore Wind Farm Order 2015 is to be amended for the purposes of this Order only as set out in Schedule 13 (modifications to the Dogger Bank Creyke Beck Offshore Wind Farm Order 2015).

Service of notices

47.—(1) A notice or other document required or authorised to be served for the purposes of this Order may be served—

- (a) by post;
- (b) by delivering it to the person on whom it is to be served or to whom it is to be given or supplied; or
- (c) with the consent of the recipient and subject to paragraphs (6) to (8), by electronic transmission.

(2) Where the person on whom a notice or other document to be served for the purposes of this Order is a body corporate, the notice or document is duly served if it is served on the secretary or clerk of that body.

(3) For the purposes of section 7 of the Interpretation Act 1978^(a) (references to service by post) as it applies for the purposes of this article, the proper address of any person in relation to the service on that person of a notice or document under paragraph (1) is, if that person has given an address for service, that address and otherwise—

- (a) in the case of the secretary or clerk of that body corporate, the registered or principal office of that body; and
- (b) in any other case, the last known address of that person at that time of service.

(4) Where for the purposes of this Order a notice or other document is required or authorised to be served on a person as having an interest in, or as the occupier of, land and the name or address of that person cannot be ascertained after reasonable enquiry, the notice may be served by—

- (a) addressing it to that person by the description of “owner”, or as the case may be “occupier” of the land (describing it); and
- (b) either leaving it in the hands of the person who is or appears to be resident or employed on the land or leaving it conspicuously affixed to some building or object on or near the land.

(5) Where a notice or other document required to be served or sent for the purposes of this Order is served or sent by electronic transmission the requirement is to be taken to be fulfilled only where—

- (a) the recipient of the notice or other document to be transmitted has given consent to the use of electronic transmission in writing or by electronic transmission;
- (b) the notice or document is capable of being accessed by the recipient;
- (c) the notice or document is legible in all material respects; and
- (d) in a form sufficiently permanent to be used for subsequent reference.

(6) Where the recipient of a notice or other document served or sent by electronic transmission notifies the sender within seven days of receipt that the recipient requires a paper copy of all or any part of that notice or other document the sender must provide such a copy as soon as reasonably practicable.

(7) Any consent to the use of an electronic transmission by a person may be revoked by that person in accordance with paragraph (8).

(8) Where a person is no longer willing to accept the use of electronic transmission for any of the purposes of this Order—

- (a) that person must give notice in writing or by electronic transmission revoking any consent given by that person for that purpose; and
- (b) such revocation is final and takes effect on a date specified by the person in the notice but that date must not be less than seven days after the date on which the notice is given.

(9) This article does not exclude the employment of any method of service not expressly provided for by it.

(10) In this article “legible in all material respects” means that the information contained in the notice or document is available to that person to no lesser extent than it would be if served, given or supplied by means of a notice or document in printed form.

Modification of Section 106 agreements relating to land

48. The undertaker will not be bound by any obligation which would fall on any owner or occupier of land which is bound by any of the section 106 agreements.

(a) 1978 c.30. Section 7 was amended by paragraph 19 of Schedule 10 to the Road Traffic Regulation Act 1984 (c.27). There are other amendments not relevant to this Order.

Compensation provisions

49. Schedule 16 (compensation to protect the coherence of the national site network) has effect.

Signed by authority of the Secretary of State for Business, Energy and Industrial Strategy

Name

Address

Head of []

Date

Department for Business, Energy and Industrial Strategy

SCHEDULE 1
AUTHORISED PROJECT

PART 1
AUTHORISED DEVELOPMENT

1. A nationally significant infrastructure project as defined in sections 14 and 15 of the 2008 Act which is located in the North Sea 69 kilometres due east of Flamborough Head at its closest point, comprising—

Work No. 1—

- (a) an offshore wind turbine generating station with a gross electrical output of over 100 megawatts comprising up to 180 wind turbine generators, each fixed to the seabed by one of monopile foundations, mono suction bucket foundations, gravity base structures or jacket foundations;
- (b) one offshore accommodation platform fixed to the seabed within the area shown on the offshore works plan by one of monopile foundations, mono suction bucket foundations, gravity base structures, box-type gravity base structures or jacket foundations, and which offshore accommodation platform may be connected to one of the offshore substations within Work No. 2 by a bridge link; and
- (c) a network of cables between the wind turbine generators, and between the wind turbine generators and Work No. 2, including one or more cable crossings;

and associated development within the meaning of section 115(2) (development for which development consent may be granted) of the 2008 Act comprising—

Work No. 2—

- (a) up to six small offshore transformer substations each fixed to the seabed by one of monopile foundations, mono suction bucket foundations, gravity base structures, box-type gravity base structures or jacket foundations, and which may be connected to each other or the offshore accommodation platform within Work No. 1(b) by a bridge link; or
- (b) up to three large offshore transformer substations each fixed to the seabed by one of monopile foundations, mono suction bucket foundations, jacket foundations, box-type gravity base structures, pontoon gravity base type 1 structures, or pontoon gravity base type 2 structures, and which may be connected to each other or the offshore accommodation platform within Work No. 1(b) by a bridge link;
- (c) in the event that the mode of transmission is HVDC, either up to three large HVDC converter substations or up to six small HVDC converter substations fixed to the seabed by one of monopile foundations, mono suction bucket foundations, jacket foundations, gravity base structures, box-type gravity base structures, pontoon gravity base type 1 structures, or pontoon gravity base type 2 structures;
- (d) a network of interconnector cables;
- (e) up to six cable circuits between Work No. 2 and Work No. 3, and between Work No. 3 and Work No. 5 consisting of offshore export cables along routes within the Order limits seaward of MLWS including one or more cable crossings; and
- (f) up to eight temporary horizontal directional drilling exit pits and associated cofferdams;

Work No. 3— in the event that the mode of transmission is HVAC—

- (a) up to three offshore HVAC booster stations fixed to the seabed within the area shown on the offshore works plan by one of monopile foundations, mono suction bucket foundations, jacket foundations, gravity base structures, pontoon gravity base type 1 structures or pontoon gravity base type 2 structures; and

- (b) up to six cable circuits between Work No. 2 and Work No. 3, and between Work No. 3 and Work No. 5 consisting of offshore export cables along routes within the Order limits seaward of MHWS including one or more cable crossings;

Work No. 4— a temporary work area associated with Work No. 2 and Work No. 3 for vessels to carry out anchoring and positioning alongside Work No. 2 or Work No. 3;

Between HMWS and MLWS and in the East Riding of Yorkshire

Work No. 5— works consisting of—

- (a) up to six cable circuits and associated electrical circuit ducts between Work No. 2 and Work No. 6; and
- (b) up to eight horizontal directional drilling exit pits, unless Work No. 2(f) is constructed.

In the East Riding of Yorkshire

Work No. 6— connection works consisting of—

- (a) up to eight horizontal directional drilling launch pits;
- (b) up to six underground cable circuits and associated electrical circuit ducts to Work No. 7;
- (c) up to eight transition joint bays;
- (d) onshore construction works;
- (e) up to 240 link boxes; and
- (f) up to 240 joint bays;

Work No. 7—works consisting of—

- (a) an onshore HVDC/HVAC substation;
- (b) an energy balancing infrastructure;
- (c) up to six cable circuits and electrical circuit ducts;
- (d) vehicular access tracks and footpaths;
- (e) a water attenuation feature;
- (f) landscaping; and
- (g) onshore construction works;

Work No. 8— connection works consisting of up to four underground cable circuits and electrical circuit ducts between Work No. 7 and the Creyke Beck National Grid substation, including a connection above ground and electrical engineering works within or around the National Grid substation buildings and compound, and onshore construction works.

Work No. 9— temporary works as follows—

- (a) temporary vehicular access tracks;
- (b) temporary works area to support the construction activities in Work No.7;
- (c) temporary logistics compounds to support the construction of Work Nos. 5, 6, 7, and 8; and
- (d) temporary construction ramp;

Work No. 10—

- (a) vehicular access tracks to serve Work No. 7, and footpaths; and
- (b) an extension to a layby.

In connection with such Work Nos. 1 to 5 and to the extent that they do not otherwise form part of any such work, further associated development comprising such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised development and which fall within the scope of the work assessed by the environmental statement, including—

- (a) scour protection around the foundations of the offshore structures;

- (b) cable protection measures such as the placement of rock, split pipe system, and/or concrete mattresses;
- (c) cable crossings;
- (d) the removal of material from the seabed within the Order limits required for the construction of Work Nos. 1 to 5 and the disposal within Work No. 1 of up to 7,211,601 cubic metres (being a maximum, not an approximate upper figure) of inert material of natural origin and within Work Nos. 2, 3 and 4 up to 4,105,735 cubic metres (being a maximum, not an approximate upper figure) of inert material of natural origin produced during construction drilling, seabed preparation for foundation works, cable installation preparation works (such as sandwave clearance and boulder clearance) and excavation of horizontal directional drilling pits; and
- (e) removal of static fishing equipment;

and in connection with such Work Nos. 6 to 10 and to the extent that they do not otherwise form part of any such work, further associated development comprising such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised development and which fall within the scope of the work assessed by the environmental statement, including—

- (a) ramps, bridges, means of access and footpaths and footpath enhancement;
- (b) bunds, embankments, swales, landscaping, signage, fencing and boundary treatments;
- (c) habitat creation and enhancement;
- (d) joint bays, link boxes, cable ducts, cable protection, joint protection, manholes, marker posts, underground cable marker, tiles and tape, and lighting and other works associated with cable laying;
- (e) works for the provision of apparatus including cabling, water and electricity supply works, foul drainage provision, surface water management systems and culverting;
- (f) works to alter the position of apparatus, including mains, sewers, drains and cables;
- (g) works to alter the course of, or otherwise interfere with, non-navigable rivers, streams or watercourses;
- (h) landscaping and related works;
- (i) other works to mitigate any adverse effects of the construction, maintenance or operation of the authorised project;
- (j) works for the benefit or protection of land affected by the authorised project;
- (k) working sites in connection with the construction of the authorised project, construction lay down areas and compounds, storage compounds and their restoration; and
- (l) enhancement.

2. The grid coordinates for that part of the authorised project which is seaward of MHWS are specified below—

<i>Point ID</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>	<i>Point ID</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>
1	54° 2' 7.166" N	0° 12' 58.381" W	68	53° 59' 17.868" N	1° 17' 11.556" E
2	54° 2' 7.022" N	0° 12' 48.680" W	69	53° 58' 55.615" N	1° 16' 14.402" E
3	54° 2' 28.905" N	0° 12' 23.610" W	70	53° 58' 54.680" N	1° 16' 10.907" E
4	54° 3' 4.330" N	0° 9' 20.564" W	71	53° 58' 54.305" N	1° 16' 7.041" E
5	54° 3' 2.961" N	0° 8' 57.136" W	72	53° 58' 48.150" N	1° 9' 3.489" E
6	54° 3' 46.646" N	0° 6' 22.355" W	73	53° 58' 49.099" N	1° 8' 56.253 E
7	54° 3' 55.011" N	0° 6' 0.668" W	74	53° 59' 33.340" N	1° 5' 22.618" E
8	54° 4' 5.592" N	0° 5' 7.239" W	75	53° 59' 16.728" N	1° 0' 29.597" E
9	54° 4' 7.120" N	0° 4' 56.079" W	76	53° 59' 10.802" N	0° 59' 53.488" E

10	54° 4' 7.947" N	0° 4' 12.149" W	77	53° 59' 0.241" N	0° 59' 7.651" E
11	54° 4' 7.646" N	0° 4' 2.450" W	78	53° 58' 58.446" N	0° 58' 57.385" E
12	54° 3' 39.131" N	0° 1' 17.603" E	79	53° 58' 53.673" N	0° 57' 53.130" E
13	54° 3' 36.602" N	0° 1' 19.983" E	80	53° 58' 53.613" N	0° 57' 45.865" E
14	54° 3' 36.653" N	0° 1' 27.388" E	81	53° 58' 54.420" N	0° 57' 26.213" E
15	54° 3' 37.742" N	0° 1' 33.117" E	82	53° 58' 58.248" N	0° 56' 45.174" E
16	54° 3' 31.432" N	0° 2' 43.501" E	83	53° 59' 56.956" N	0° 50' 1.171" E
17	54° 3' 21.791" N	0° 4' 54.431" E	84	54° 0' 12.504" N	0° 48' 1.381" E
18	54° 3' 20.107" N	0° 5' 29.470" E	85	54° 0' 12.515" N	0° 47' 27.367" E
19	54° 3' 20.504" N	0° 5' 36.188" E	86	54° 0' 13.296" N	0° 46' 40.673" E
20	54° 3' 29.852" N	0° 6' 6.995" E	87	54° 0' 12.634" N	0° 46' 30.459" E
21	54° 4' 17.513" N	0° 8' 11.780" E	88	54° 0' 11.415" N	0° 46' 24.233" E
22	54° 4' 19.804" N	0° 8' 20.650" E	89	53° 59' 39.945" N	0° 44' 55.026" E
23	54° 4' 29.084" N	0° 9' 5.618" E	90	53° 59' 33.773" N	0° 44' 35.130" E
24	54° 4' 30.902" N	0° 9' 18.035" E	91	53° 59' 28.402" N	0° 44' 15.020" E
25	54° 4' 31.360" N	0° 9' 29.006" E	92	53° 59' 26.858" N	0° 44' 5.508" E
26	54° 4' 30.770" N	0° 11' 14.823" E	93	53° 59' 23.738" N	0° 43' 35.842" E
27	54° 4' 41.436" N	0° 13' 46.313" E	94	53° 59' 23.191" N	0° 42' 42.267" E
28	54° 4' 51.664" N	0° 18' 10.115" E	95	53° 59' 23.584" N	0° 42' 32.090" E
29	54° 4' 49.674" N	0° 22' 20.794" E	96	53° 59' 29.653" N	0° 41' 39.599" E
30	54° 4' 34.602" N	0° 25' 8.241" E	97	53° 59' 31.433" N	0° 41' 30.497" E
31	54° 3' 47.343" N	0° 28' 41.594" E	98	53° 59' 34.340" N	0° 41' 20.783" E
32	54° 3' 29.522" N	0° 29' 45.309" E	99	54° 1' 11.539" N	0° 37' 38.060" E
33	54° 3' 12.983" N	0° 30' 41.496" E	100	54° 1' 53.954" N	0° 30' 4.210" E
34	54° 3' 11.866" N	0° 30' 46.755" E	101	54° 1' 55.082" N	0° 29' 58.960" E
35	54° 2' 29.831" N	0° 38' 16.384" E	102	54° 2' 16.836" N	0° 28' 45.068" E
36	54° 2' 28.252" N	0° 38' 27.328" E	103	54° 2' 34.272" N	0° 27' 42.729" E
37	54° 2' 25.710" N	0° 38' 37.464" E	104	54° 3' 14.191" N	0° 24' 52.548" E
38	54° 2' 22.467" N	0° 38' 46.275" E	105	54° 3' 28.906" N	0° 22' 9.330" E
39	54° 0' 46.742" N	0° 42' 25.062" E	106	54° 3' 30.827" N	0° 18' 25.085" E
40	54° 0' 44.114" N	0° 42' 47.823" E	107	54° 3' 25.965" N	0° 15' 11.395" E
41	54° 0' 44.168" N	0° 42' 53.983" E	108	54° 3' 10.152" N	0° 11' 26.334" E
42	54° 0' 37.964" N	0° 43' 8.166" E	109	54° 3' 9.658" N	0° 11' 1.640" E
43	54° 0' 33.962" N	0° 43' 31.109" E	110	54° 3' 10.393" N	0° 9' 39.559" E
44	54° 0' 51.704" N	0° 44' 6.496" E	111	54° 3' 7.676" N	0° 9' 26.386" E
45	54° 0' 57.175" N	0° 44' 19.901" E	112	54° 3' 13.846" N	0° 8' 47.985" E
46	54° 1' 20.169" N	0° 45' 45.285" E	113	54° 1' 59.146" N	0° 5' 34.054" E
47	54° 1' 22.890" N	0° 46' 0.288" E	114	54° 1' 59.193" N	0° 5' 24.927" E
48	54° 1' 33.372" N	0° 47' 34.265" E	115	54° 2' 1.399" N	0° 4' 39.525" E
49	54° 1' 33.357" N	0° 48' 6.711" E	116	54° 2' 14.627" N	0° 1' 34.678" E
50	54° 1' 32.702" N	0° 48' 19.691" E	117	54° 2' 13.616" N	0° 1' 29.370" E
51	54° 1' 26.938" N	0° 49' 8.341" E	118	54° 2' 9.931" N	0° 1' 16.745" W
52	54° 1' 15.588" N	0° 50' 33.236" E	119	54° 1' 43.569" N	0° 0' 7.896" W
53	54° 0' 17.357" N	0° 57' 13.969" E	120	54° 1' 31.663" N	0° 0' 25.766" W
54	54° 0' 15.266" N	0° 57' 36.824" E	121	54° 1' 7.679" N	0° 1' 51.463" W
55	54° 0' 14.766" N	0° 57' 48.644" E	122	54° 1' 0.011" N	0° 2' 21.082" W
56	54° 0' 17.493" N	0° 58' 26.081" E	123	54° 1' 0.055" N	0° 4' 18.699" W
57	54° 0' 27.621" N	0° 59' 10.323" E	124	54° 1' 25.632" N	0° 12' 25.517" W

58	54° 0' 36.596" N	1° 0' 6.568" E	125	54° 1' 41.883" N	0° 12' 50.086" W
59	54° 0' 53.351" N	1° 4' 59.324" E	126	54° 1' 39.112" N	0° 12' 50.078" W
60	54° 2' 51.236" N	1° 8' 18.052" E	127	54° 1' 39.246" N	0° 12' 59.069" W
61	54° 7' 24.985" N	0° 59' 54.702" E	128	54° 1' 39.257" N	0° 12' 59.850" W
62	54° 9' 13.497" N	1° 0' 43.850" E	129	54° 1' 39.742" N	0° 12' 59.821" W
63	54° 10' 49.480" N	0° 58' 21.782" E	130	54° 1' 39.731" N	0° 12' 59.103" W
64	54° 12' 37.143" N	0° 58' 31.095" E	131	54° 1' 43.547" N	0° 12' 59.118" W
65	54° 12' 17.413" N	1° 12' 18.263" E	132	54° 1' 43.811" N	0° 12' 59.860" W
66	54° 4' 13.012" N	1° 30' 5.270" E	133	54° 2' 7.201" N	0° 13' 0.387" W
67	53° 59' 15.598" N	1° 17' 20.651" E			

PART 2

ANCILLARY WORKS

1. Works within the Order limits which have been subject to an environmental impact assessment recorded in the environmental statement comprising—

- (a) temporary landing places, moorings or other means of accommodating or anchoring vessels in the construction and/or maintenance of the authorised development;
- (b) marking buoys, beacons, fenders and other navigational warning or ship impact protection works; and
- (c) temporary works for the benefit or protection of land or structures affected by the authorised development.

PART 3

REQUIREMENTS

Time limits

1. The authorised project must not be commenced after the expiration of seven years beginning with the date this Order comes into force.

Detailed offshore design parameters

2.—(1) The total number of wind turbine generators comprised in the authorised project must not exceed 180.

(2) Subject to sub-paragraph (3), each wind turbine generator forming part of the authorised project must not—

- (a) exceed a height of 370 metres when measured from LAT to the tip of the vertical blade;
- (b) exceed a rotor diameter of 305 metres;
- (c) be less than 42.43 metres from LAT to the lowest point of the rotating blade; and
- (d) be less than 810 metres from the nearest wind turbine generator in all directions.

(3) The minimum distance in sub-paragraph (2)(d) between each wind turbine generator is to be measured from the centre point of the wind turbine generator.

(4) Wind turbine generator foundation structures forming part of the authorised project must be one of either monopile foundations, mono suction bucket foundations, gravity base structures or jacket foundations.

(5) No wind turbine generator—

- (a) jacket foundations employing pin piles forming part of the authorised project may—

- (i) have a pin pile diameter of greater than four metres; and
 - (ii) employ more than 16 pin piles per jacket foundation; and
- (b) monopile foundation forming part of the authorised project may have a diameter greater than 15 metres.
- (6) The total combined seabed footprint area for wind turbine generator foundations must not exceed—
- (a) 302,180 square metres excluding scour protection; and
 - (b) 985,240 square metres including scour protection.
- (7) The wind turbine generators comprised in the authorised project must be constructed in accordance with the parameters set out in the pro-rata annex.

3.—(1) The total number of offshore electrical installations and offshore accommodation platforms must not exceed ten, consisting of a combination of no more than—

- (a) six small offshore transformer substations;
- (b) three large offshore transformer substations;
- (c) three offshore HVAC booster stations;
- (d) six small offshore HVDC converter stations;
- (e) three large offshore HVDC converter stations; and
- (f) one offshore accommodation platform.

(2) The dimensions of any small offshore transformer substation (including auxiliary structures, such as a helipad, crane, lightning protection, but excluding masts, radar and antennae) forming part of the authorised project must not exceed—

- (a) 100 metres in height when measured from LAT;
- (b) 90 metres in length; and
- (c) 90 metres in width.

(3) The dimensions of any large offshore transformer substation (including auxiliary structures, such as a helipad, crane, lightning protection, but excluding masts, radar and antennae) forming part of the authorised project must not exceed—

- (a) 100 metres in height when measured from LAT;
- (b) 180 metres in length; and
- (c) 90 metres in width.

(4) The dimensions of any offshore HVAC booster station (including auxiliary structures, such as a helipad, crane, lightning protection, but excluding masts, radar and antennae) forming part of the authorised project must not exceed—

- (a) 100 metres in height when measured from LAT;
- (b) 90 metres in length; and
- (c) 90 metres in width.

(5) The dimensions of any small offshore HVDC converter substation (including auxiliary structures, such as a helipad, crane, lightning protection, but excluding masts, radar and antennae) forming part of the authorised project must not exceed—

- (a) 90 metres in height when measured from LAT;
- (b) 100 metres in length; and
- (c) 100 metres in width.

(6) The dimensions of any large offshore HVDC converter substation (including auxiliary structures, such as a helipad, crane, lightning protection, but excluding masts, radar and antennae) forming part of the authorised project must not exceed—

- (a) 100 metres in height when measured from LAT;

- (b) 180 metres in length; and
 - (c) 90 metres in width.
- (7) The dimensions of any offshore accommodation platform forming part of the authorised project must not exceed—
- (a) 64 metres in height when measured from LAT;
 - (b) 60 metres in length; and
 - (c) 60 metres in width.
- (8) Offshore accommodation platform foundation structures forming part of the authorised project must be one of either monopile foundations, mono suction bucket foundations, gravity base structures, jacket foundations or box-type gravity base structures.
- (9) Offshore electrical installation foundation structures forming part of the authorised project must be one of the following foundation options—
- (a) for small offshore transformer substations and offshore HVAC booster stations either monopile foundations, mono suction bucket foundations, jacket foundations, gravity base structures or box-type gravity base structures; and
 - (b) for large offshore transformer substations and offshore HVDC converter stations either monopile foundations, mono suction bucket foundations, jacket foundations, box-type gravity base structures, gravity base structures, pontoon gravity base type 1 structures, or pontoon gravity base type 2 structures.
- (10) No offshore electrical installation or offshore accommodation platform—
- (a) jacket foundation employing pin piles forming part of the authorised project may—
 - (i) have a pin pile diameter of greater than four metres; and
 - (ii) employ more than 16 pin piles per jacket foundation; and
 - (b) monopile foundation forming part of the authorised project may have a diameter greater than 15 metres.
- (11) The total seabed footprint area for offshore accommodation platform foundations must not exceed—
- (a) 5,625 square metres excluding scour protection; and
 - (b) 30,625 square metres including scour protection.
- (12) The total seabed footprint area for offshore electrical installation foundations must not exceed—
- (a) 101,250 square metres excluding scour protection; and
 - (b) 371,250 square metres including scour protection.
- (13) The total number of gravity base structures may not exceed 90, consisting of a combination of no more than—
- (a) 80 for wind turbine generators; and
 - (b) ten for offshore electrical installations and offshore accommodation platforms.
- (14) The offshore electrical installations and offshore accommodation comprised in the authorised project must be constructed in accordance with parameters set out in the pro-rata annex.
- (15) A bridge link forming part of the authorised development must be installed at a minimum height of 20 metres when measured from LAT.
- 4.** The total volume of scour protection for wind turbine generators, offshore accommodation platforms and offshore electrical installations may not exceed 2,172,040 cubic metres and must be in accordance with the pro-rata annex.

5.—(1) The number of cable circuits must not exceed six.

(2) The cables comprising Work No. 1(c) must not—

- (a) exceed 600 kilometres in length; and
 - (b) be subject to cable protection with an area greater than 624,000 square metres.
- (3) The cables comprising Work No. 2(d) must not—
- (a) exceed 90 kilometres in length; and
 - (b) be subject to cable protection with an area greater than 94,000 square metres.
- (4) The cables comprising Work No. 2(e) must not—
- (a) exceed 654 kilometres in length; and
 - (b) be subject to cable protection with an area greater than 792,000 square metres.
- (5) The total number of the cable crossings must not exceed—
- (a) 32 within the area of Work Nos. 1 and 2(d); and
 - (b) 54 within the area utilised for Work No. 2(e);
unless otherwise agreed with the MMO.
- (6) The total volume of cable protection must not exceed 2,042,000 cubic metres with a maximum footprint of 2,058,000 square metres.
- (7) The cables and cable circuits comprised in the authorised development must be constructed in accordance with the parameters set out in the pro-rata annex.

Biodiversity net gain

6.—(1) No stage of the connection works in Work No. 7 may commence until a net gain strategy (which must accord with the outline net gain strategy) in relation to that stage has been submitted to and approved by the relevant planning authority, in consultation with the relevant SNCBs.

- (2) The net gain strategy must be implemented as approved.

Detailed design approval onshore

7.—(1) Construction of Work No. 7(a) and (b) may not commence until details of—

- (a) the layout;
- (b) scale;
- (c) proposed finished ground levels;
- (d) external appearance and materials;
- (e) hard surfacing materials;
- (f) vehicular and pedestrian access, parking and circulation areas;
- (g) minor structures, such as furniture, refuse or other storage units, signs and lighting;
- (h) proposed and existing functional services above and below, ground, including drainage, power and communications cables and pipelines, manholes and supports; and
- (i) means to control operational noise from Work No. 7 to a level no greater than 5dB above representative background (LA90,T) at the nearest identified noise sensitive receptors;

relating to that work of the authorised project have been submitted to and approved by the relevant planning authority.

(2) The details submitted under sub-paragraph (1) must be in accordance with the outline design plan.

(3) Work No. 7(a) and (b) must be carried out in accordance with the approved details.

(4) Work No. 7(a) and (b) may not commence until confirmation of the choice of HVDC or HVAC or a combination of both has been provided to the relevant planning authority, either before, or at the same time as, the details referred to in sub-paragraph (1).

Provision of landscaping

8.—(1) No stage of the connection works may commence until a written landscape management plan and associated work programme (which accords with the outline landscape management plan and outline ecological management plan) for that stage of the connection works has been submitted to and approved by the relevant planning authority in consultation with the relevant SNCBs and Historic England.

(2) The landscape management plan must include details of—

- (a) surveys, assessments and method statements as guided by BS 5837 and the Hedgerows Regulations 1997;
- (b) location, number, species, size and planting density of any proposed planting;
- (c) cultivation, importing of materials and other operations to ensure plant establishment; and
- (d) implementation timetables for the relevant stage of the landscaping works.

(3) The landscape management plan must be carried out as approved.

Implementation and maintenance of landscaping

9.—(1) All landscape works must be carried out in accordance with the landscape management plans approved under requirement 8 (provision of landscaping), and in accordance with the relevant recommendations of appropriate British Standards.

(2) Unless otherwise stated in the approved landscape management plan or enhancement strategy, any tree or shrub planted as part of an approved landscape management plan that, within a period of five years after planting, is removed by the undertaker, dies or becomes, in the opinion of the relevant planning authority, seriously damaged or diseased must be replaced in the first available planting season with a specimen of the same species and size as that originally planted unless otherwise approved by the relevant planning authority.

(3) Unless otherwise stated in the approved landscape management plan or enhancement strategy, within a period of five years after completion of the planting of the approved landscape works comprising Work No. 7(f), a landscape management and maintenance plan for Work No. 7(f) must be submitted to and approved by the relevant planning authority.

(4) The landscape management and maintenance plan for Work No. 7(f) must include details of the management and maintenance of Work No. 7(f) until the connection works are decommissioned in accordance with the onshore decommissioning plan approved under requirement 24 (onshore decommissioning).

(5) The landscape management and maintenance plan for Work No. 7(f) must be carried out as approved.

Ecological management plan

10.—(1) No stage of the connection works may commence until a written ecological management plan (which accords with the outline ecological management plan and the relevant recommendations of appropriate British Standards) for that stage of the connection works reflecting the survey results and ecological mitigation has been submitted to and approved by the relevant planning authority in consultation with the relevant SNCBs and (where works have potential to impact wetland habitats) the Environment Agency.

(2) The ecological management plan must include an implementation timetable for the relevant stage of the connection works and must be carried out as approved.

Highway accesses

11.—(1) Construction of any new permanent or temporary means of access to a highway, or alteration, or use of an existing means of access to a highway, must not commence until an access plan for that access has been submitted to and approved by the relevant highway authority.

(2) The access plan must include details of the siting, design, layout, visibility splays, access management measures, lighting, signing, safety measures and a maintenance programme relevant to the access it relates to.

(3) The highway accesses (including visibility splays) must be constructed and maintained in accordance with the approved details.

Fencing and other means of permanent enclosure

12.—(1) No stage of the connection works may commence until details of all proposed permanent fences, walls or other means of enclosure of that stage of the connection works have been submitted to and approved by the relevant planning authority.

(2) The details submitted under paragraph (1) must be in accordance with the outline design plan.

(3) Any approved permanent fencing in relation to the connection works in Work No. 7 must be completed before those works are brought into use and must be maintained for the operational lifetime of the connection works in Work No. 7.

Temporary fencing and other temporary means of enclosure

13.—(1) The details of any temporary fences, walls, or other means of enclosure required for the construction of the connection works must be included in the code of construction practice approved under requirement 18 (which must accord with the outline code of construction practice).

(2) All construction sites must remain securely enclosed at all times during construction of the connection works in accordance with the details approved under sub-paragraph (1) above.

Surface and foul water drainage

14.—(1) No stage of the connection works may commence until written details of the surface and (if any) foul water drainage system (including means of pollution control) (which must accord with the outline onshore infrastructure drainage strategy) for the construction of that stage of the connection works have, after consultation with the relevant sewerage and drainage authorities and the Environment Agency, been submitted to and approved by the lead local flood authority.

(2) No stage of the connection works may commence operation until written details of the surface and (if any) foul water drainage system (including means of pollution control) for that stage of the connection works have, after consultation with the relevant sewerage and drainage authorities and the Environment Agency, been submitted to and approved by the lead local flood authority.

(3) The surface and foul water drainage system must be constructed, operated and maintained in accordance with the approved details.

Contaminated land and groundwater scheme

15.—(1) No stage of the connection works or Work No. 5 may commence until a written scheme to deal with the contamination of any land (including groundwater) of that stage of the connection works or Work No. 5 within the Order limits that is likely to cause significant harm to persons or pollution of controlled waters or the environment has been submitted to, and approved by, the relevant planning authority in consultation with the Environment Agency and, to the extent that the plan relates to the intertidal area, the MMO.

(2) The scheme must include an investigation and assessment report, to identify the extent of any contamination and the remedial measures to be taken for that stage to render the land fit for its intended purpose, together with a management plan which sets out long-term measures with respect to any contaminants remaining on the site.

(3) Such remediation as may be identified in the approved scheme must be carried out in accordance with the approved scheme.

Surface water

16.—(1) No stage of the connection works in Work No. 7 may commence until, in respect of that installation, a detailed surface water scheme has been prepared in consultation with the relevant sewerage and drainage authorities and Environment Agency and submitted to and approved by the lead local flood authority.

(2) The detailed surface water schemes must accord with the outline onshore infrastructure drainage strategy and—

- (a) be based on sustainable drainage principles;
- (b) include an assessment of the hydrological and hydrogeological context of the connection works in Work No. 7; and
- (c) include detailed designs of a surface water drainage scheme.

(3) Construction of the connection works in Work No. 7 must be carried out in accordance with the approved scheme.

Onshore archaeology

17.—(1) No stage of the connection works or Work No. 5 may commence until a written scheme of archaeological investigation (which must accord with the outline written scheme of investigation for onshore archaeology) for that stage of the connection works or Work No. 5 has been submitted to and approved by the relevant planning authority in consultation with Historic England.

(2) Archaeological investigations carried out as part of onshore site preparation works must only take place in accordance with a specific written scheme of investigation (which must accord with the outline written scheme of investigation for onshore archaeology) which has been submitted to and approved by the relevant planning authority in consultation with Historic England.

(3) All archaeological investigations (other than archaeological investigations carried out as part of onshore site preparation works referred to in sub-paragraph (2)) must be carried out in accordance with the written scheme of archaeological investigation approved under sub-paragraph (1).

(4) The archaeological site investigations and post investigation assessment must be completed in accordance with the programme set out in the written scheme of archaeological investigation and provision made for analysis, publication and dissemination of results and archive deposition.

Code of construction practice

18.—(1) No stage of the connection works, Work No. 2 (f) or Work No. 5 may commence until a code of construction practice (which must accord with the outline code of construction practice but may not include the outline construction traffic management plan in the event that the outline construction traffic management plan has been, or is in the process of being, approved separately pursuant to requirement 19) for that stage of the connection works has been submitted to and approved by the relevant planning authority, in consultation with the Environment Agency, the relevant SNCBs and, if applicable, the MMO.

(2) All connection works must be undertaken in accordance with the relevant approved code of construction practice.

Construction traffic management plan

19.—(1) No stage of the connection works or Work No. 5 may commence until written details of a construction traffic management plan (which accords with the outline construction traffic management plan) for that stage of the connection works or Work No. 5 has been submitted to and approved by the relevant planning authority in consultation with the relevant highway authorities (and approved by Network Rail in accordance with paragraph 5 of Part 4 of Schedule 9).

(2) The construction traffic management plan must be implemented as approved.

European protected species onshore

20.—(1) No stage of the connection works may commence until final pre-construction survey work has been carried out to establish whether a European protected species is present on any of the land affected, or likely to be affected, by that stage of the connection works or in any of the trees to be lopped or felled as part of that stage of the connection works.

(2) Where a European protected species is shown to be present, the relevant stage(s) of the connection works must not begin until, after consultation with the relevant SNCBs and the relevant planning authority, a scheme of protection and mitigation measures has been submitted to and approved by the relevant planning authority or a European protected species licence granted by Natural England.

(3) The connection works must be carried out in accordance with the approved scheme.

(4) In this Requirement, “European Protected Species” has the same meaning as in regulations 42 and 46 of the Conservation of Habitats and Species Regulations 2017(a).

Restoration of land used temporarily for construction

21. Any land landward of MLWS within the Order limits which is used temporarily for construction of the connection works and not ultimately incorporated in permanent works or approved landscaping, must be reinstated in accordance with such details as have been submitted to and approved by the relevant planning authority in consultation with, where appropriate, the MMO, and the relevant highway authority, as soon as reasonably practicable and in any event within twelve months of completion of the connection works.

Control of noise during operational phase

22.—(1) Work Nos. 7(a), (b) and (c) must not commence operations until a noise management plan (NMP) for those works has been submitted to and approved by the relevant planning authority.

(2) The NMP must set out the particulars of—

(a) any necessary noise attenuation and mitigation measures to be taken to minimise noise resulting from Work No. 7, including any noise limits; and

(b) a scheme for monitoring attenuation and mitigation measures provided under subparagraph (a) which must include—

(i) the circumstances under which noise will be monitored;

(ii) the locations at which noise will be monitored;

(iii) the method of noise measurement (which must be in accord with BS 4142:2014+A1:2019, an equivalent successor standard or other agreed noise measurement methodology appropriate to the circumstances); and

(iv) a complaints procedure.

(3) The NMP must be implemented as approved.

Enhancement strategy

23.—(1) No stage of the connection works may commence until written details of an enhancement strategy (which accords with the outline enhancement strategy) for that stage of the connection works has been submitted to and approved by the relevant planning authority.

(2) The enhancement strategy must be implemented as approved.

(a) S.I. 2017/1012.

Ministry of Defence radar mitigation

24.—(1) No wind turbine generator forming part of the authorised development is permitted to rotate its rotor blades on its horizontal axis until the Secretary of State, having consulted with the Ministry of Defence, confirms satisfaction that appropriate mitigation will be implemented and maintained for the life of the authorised development and that arrangements have been put in place with the Ministry of Defence to ensure that the approved mitigation is implemented.

(2) For the purposes of this requirement—

“appropriate mitigation” means measures to prevent or remove any unacceptable effects which the authorised development will have on air defence radar capability of Remote Radar Head (RRH) Staxton Wold and the Ministry of Defence’s air surveillance and control operations that it supports;

“approved mitigation” means the detailed Radar Mitigation Scheme (RMS) that will set out the appropriate measures and timescales for implementation as agreed with the Ministry of Defence at the time the Secretary of State confirms satisfaction in accordance with sub-paragraph (1); and

“Ministry of Defence” means the Ministry of Defence as represented by Defence Infrastructure Organisation – Safeguarding, St George’s House, DIO Head Office, DMS Whittington, Lichfield, Staffordshire, WS14 9PY or any successor body.

(3) The undertaker must thereafter comply with all other obligations contained within the approved mitigation for the life of the authorised development.

Onshore decommissioning

25.—(1) Within three months of the permanent cessation of operation of the connection works an onshore decommissioning plan must be submitted to the relevant planning authority for approval unless otherwise agreed by the relevant planning authority.

(2) The relevant planning authority must provide its decision on the onshore decommissioning plan required under requirement 25(1) within three months of submission of such plan unless otherwise agreed by the relevant planning authority and the undertaker.

(3) The onshore decommissioning plan must be implemented as approved.

Employment and skills plan

26.—(1) No stage of the connection works may commence until for that stage an employment and skills plan (which accords with the outline employment and skills plan) in relation to the authorised development has been submitted to and approved by the relevant planning authority.

(2) The employment and skills plan must be implemented as approved.

Energy balancing infrastructure safety management

27.—(1) Work No. 7(b) must not commence until an energy balancing infrastructure HazID report (which accords with the outline energy balancing infrastructure HazID report) has been submitted to and approved by the relevant planning authority.

(2) The energy balancing infrastructure HazID report must be implemented as approved.

Stages of authorised development

28.—(1) The authorised development may not be commenced until a written scheme setting out the stages of construction of the authorised project has been submitted to and approved by the relevant planning authority, in relation to the connection works, or the MMO, in relation to works seaward of MHWS.

(2) The stages of construction referred to in sub-paragraph (1) must not permit the authorised development to be constructed in more than one overall phase.

(3) The scheme must be implemented as approved.

Claxby Radar Mitigation

29.—(1) No wind turbine generator blades forming part of the authorised development may be installed until the Secretary of State, having consulted with NATS, has confirmed satisfaction that appropriate mitigation will be implemented and maintained for the required period and that arrangements have been put in place with NATS to ensure that the approved mitigation is implemented and in operation prior to installation of the wind turbine blades.

(2) The undertaker must thereafter comply with the obligations contained within the approved mitigation for the required period.

(3) For the purposes of this requirement—

“appropriate mitigation” means measures to mitigate any adverse effects which the operation of the authorised development will have on the primary surveillance radar at Claxby and NATS’ associated air traffic (surveillance and control) services/operations during the required period;

“approved mitigation” means the detailed Primary Radar Mitigation Scheme setting out the appropriate mitigation approved by the Secretary of State and confirmed in accordance with sub-paragraph (1);

“NATS” means NATS (En-Route) Plc (company number 04129273) or any successor body; and

“the required period” means the shorter of—

- (a) the operational life of the authorised development; and
- (b) the period ending on the date notified to the Secretary of State by the undertaker and confirmed by NATS being the date on which NATS no longer requires the appropriate mitigation to be in place.

Requirement for written approval

30. Where the approval, agreement or confirmation of the Secretary of State, the relevant planning authority or another person is required under a requirement, that approval, agreement or confirmation must be given in writing.

Amendments to approved details

31.—(1) With respect to any requirement which requires the authorised project to be carried out in accordance with the details approved by the relevant planning authority or another person, the approved details must be carried out as approved unless an amendment or variation is previously agreed by the relevant planning authority or that other person in accordance with sub-paragraph (2).

(2) Any amendments to or variations from the approved details must be in accordance with the principles and assessments set out in the environmental statement. Such agreement may only be given in relation to immaterial changes where it has been demonstrated to the satisfaction of the relevant planning authority or that other person that the subject matter of the agreement sought is unlikely to give rise to any materially greater environmental effects from those assessed in the environmental statement.

(3) The approved details must be taken to include any amendments that may subsequently be approved by the relevant planning authority or that other person.

PART 4

PROCEDURE FOR DISCHARGE OF REQUIREMENTS

Interpretation

1. In this Part of this Schedule, “discharging authority” means—
 - (a) any body responsible for giving any consent, agreement or approval required by a requirement included in Part 3 of this Schedule, or for giving any consent, agreement or approval further to any document referred to in any such requirement; or
 - (b) the local authority in the exercise of its functions set out in sections 60 (control of noise on construction sites) and 61 (prior consent for work on construction sites) of the Control of Pollution Act 1974 subsequently referred to as “the 1974 Act”(a).

Applications made under requirements

2.—(1) Where an application has been made to the discharging authority for any consent, agreement or approval required by a requirement contained in Part 3 of this Schedule, or for any consent, agreement or approval further to any document referred to in any such requirement, the discharging authority must give notice to the undertaker of its decision on the application within a period of eight weeks beginning with—

- (a) the day immediately following that on which a valid application is received by the discharging authority (such validity to be confirmed by the discharging authority within five days of receipt of the application); or
- (b) where further information is requested under paragraph 3 the day immediately following that on which the further information has been supplied by the undertaker, or such longer period as may be agreed in writing by the undertaker and the discharging authority.

(2) In determining any application made to the discharging authority for any consent, agreement or approval required by a requirement contained in Part 3 of this Schedule, the discharging authority may—

- (a) give or refuse its consent, agreement or approval; or
- (b) give its consent, agreement or approval either subject to reasonable conditions, or unconditionally,

and where consent, agreement or approval is refused or granted subject to conditions the discharging authority must provide its reasons for that decision with the notice of the decision.

Further information regarding requirements

3.—(1) In relation to any application referred to in paragraph 2, the discharging authority may request such further information from the undertaker as it considers necessary to enable it to consider the application.

(2) If the discharging authority considers that further information is necessary and the requirement concerned contained in Part 3 of this Schedule does not specify that consultation with a consultee is required, the discharging authority must, within ten working days of receipt of the application, notify the undertaker in writing specifying the further information required.

(3) If the requirement concerned contained in Part 3 of this Schedule specifies that consultation with a consultee is required, the discharging authority must issue the application to the consultee within five working days of receipt of the application, and notify the undertaker in writing specifying any further information requested by the consultee within five working days of receipt of such a request.

(a) 1974 c.40. Section 61 was amended by Schedule 7 to the Building Act 1984 (c.55), Schedule 15 to the Environmental Protection Act 1990 (c.43) and Schedule 24 to the Environment Act 1995 (c.25).

(4) If the discharging authority does not give the notification within the period specified in sub-paragraph (2) or (3) it (and the consultee, as the case may be) is deemed to have sufficient information to consider the application and is not entitled to request further information without the prior agreement of the undertaker.

Appeals

4.—(1) Where a person (“the applicant”) makes an application to a discharging authority, the applicant may appeal to the Secretary of State in the event that—

- (a) the discharging authority refuses an application for any consent, agreement or approval required by—
 - (i) a requirement contained in Part 3 of this Schedule; or
 - (ii) a document referred to in any requirement contained in Part 3 of this Schedule;
- (b) the discharging authority does not determine such an application within the time period set out in paragraph 2(1), or grants it subject to conditions;
- (c) the discharging authority issues a notice further to sections 60 (control of noise on construction sites) or 61 (prior consent for work on construction sites) of the 1974 Act;
- (d) on receipt of a request for further information pursuant to paragraph 3 of this Part of this Schedule, the applicant considers that either the whole or part of the specified information requested by the discharging authority is not necessary for consideration of the application; or
- (e) on receipt of any further information requested, the discharging authority notifies the applicant that the information provided is inadequate and requests additional information which the applicant considers is not necessary for consideration of the application.

(2) The appeal process is as follows—

- (a) any appeal by the applicant must be made within 42 days of the date of the notice of the decision or determination, or (where no determination has been made) the expiry of the time period set out in paragraph 2(1), giving rise to the appeal referred to in sub-paragraph (1);
- (b) the applicant must submit the appeal documentation to the Secretary of State and must on the same day provide copies of the appeal documentation to the discharging authority and any consultee specified under the relevant requirement contained in Part 3 of this Schedule;
- (c) as soon as is practicable after receiving the appeal documentation, the Secretary of State must appoint a person to consider the appeal (“the appointed person”) and must notify the appeal parties of the identity of the appointed person and the address to which all correspondence for the attention of the appointed person should be sent;
- (d) the discharging authority and any consultee (if applicable) must submit their written representations together with any other representations to the appointed person in respect of the appeal within 20 working days of the start date specified by the appointed person and must ensure that copies of their written representations and any other representations as sent to the appointed person are sent to each other and to the applicant on the day on which they are submitted to the appointed person;
- (e) the applicant must make any counter-submissions to the appointed person within 20 working days of receipt of written representations pursuant to sub-paragraph (d) above; and
- (f) the appointed person must make a decision and notify it to the appeal parties, with reasons, as soon as reasonably practicable after the end of the 20 day period for counter-submissions under sub-paragraph (e).

(3) The appointment of the appointed person pursuant to sub-paragraph 4(2)(c) may be undertaken by a person appointed by the Secretary of State for this purpose instead of by the Secretary of State.

(4) In the event that the appointed person considers that further information is necessary to enable the appointed person to consider the appeal the appointed person must as soon as practicable notify the appeal parties in writing specifying the further information required, the appeal party from whom the information is sought, and the date by which the information is to be submitted.

(5) Any further information required pursuant to sub-paragraph (4) must be provided by the party from whom the information is sought to the appointed person and to the other appeal parties by the date specified by the appointed person. The appointed person must notify the appeal parties of the revised timetable for the appeal on or before that day. The revised timetable for the appeal must require submission of written representations to the appointed person within ten working days of the date specified by the appointed person, but must otherwise be in accordance with the process and time limits set out in sub-paragraphs 4(2)(c) to (e).

(6) On an appeal under this paragraph, the appointed person may—

- (a) allow or dismiss the appeal; or
- (b) reverse or vary any part of the decision of the discharging authority (whether the appeal relates to that part of it or not),

and may deal with the application as if it had been made to the appointed person in the first instance.

(7) The appointed person may proceed to a decision on an appeal taking into account such written representations as have been sent within the relevant time limits and in the sole discretion of the appointed person such written representations as have been sent outside of the relevant time limits.

(8) The appointed person may proceed to a decision even though no written representations have been made within the relevant time limits, if it appears to the appointed person that there is sufficient material to enable a decision to be made on the merits of the case.

(9) The decision of the appointed person on an appeal is final and binding on the parties, and a court may entertain proceedings for questioning the decision only if the proceedings are brought by a claim for a judicial review.

(10) If an approval is given by the appointed person pursuant to this Part of this Schedule, it is deemed to be an approval for the purpose of Part 3 of this Schedule as if it had been given by the discharging authority. The discharging authority may confirm any determination given by the appointed person in identical form in writing, but a failure to give such confirmation (or a failure to give it in identical form) is not to be taken to affect or invalidate the effect of the appointed person's determination.

(11) Save where a direction is given pursuant to sub-paragraph (12) requiring the costs of the appointed person to be paid by the discharging authority, the reasonable costs of the appointed person are to be met by the applicant.

(12) On application by the discharging authority or the applicant, the appointed person may give directions as to the costs of the appeal and as to the parties by whom the costs of the appeal are to be paid. In considering whether to make any such direction and the terms on which it is to be made, the appointed person must have regard to relevant guidance on the Planning Practice Guidance website or any official circular or guidance which may from time to time replace it.

SCHEDULE 2
STREETS SUBJECT TO STREET WORKS

<i>(1)</i> <i>Street subject to street works</i>	<i>(2)</i> <i>Extent of works</i>
Unnamed Road	Between the reference points 1a and 1b and shaded Green on sheet 1 of the streets plan
Sands Road	Between the reference points 1c and 1d and shaded Brown on sheet 1 of the streets plan
Private Access	Between the reference points 2a, 2b and 2c and shaded Brown on sheets 1 and 2 of the streets plan
Bridlington Road	Between the reference points 3a and 3b and shaded Green on sheets 2 and 3 of the streets plan
Gransmoor Road	Between the reference points 4a and 4b and shaded Green on sheets 3 and 4 of the streets plan
Private Access	Between the reference points 5a and 5b and shaded Brown on sheet 4 of the streets plan
Private Access	Between the reference points 6a and 6b and shaded Brown on sheet 4 of the streets plan
Private Access	Between the reference points 7a and 7b and shaded Brown on sheet 4 of the streets plan
Private Access	Between the reference points 8a and 8b and shaded Brown on sheets 4 and 5 of the streets plan
Lissett Lane	Between the reference points 8c and 8d and shaded Green on sheets 4 and 5 of the streets plan
Private Access	Between the reference points 9a and 9b and shaded Brown on sheet 5 of the streets plan
Private Access	Between the reference points 10a and 10b and shaded Brown on sheet 6 of the streets plan
Gembling Lane	Between the reference points 11a and 11b and shaded Green on sheet 6 of the streets plan
Old Howe Lane	Between the reference points 12a and 12b and shaded Green on sheets 6 and 7 of the streets plan
Main Street	Between the reference points 13a and 13b and shaded Green on sheet 7 of the streets plan
Private Access	Between the reference points 14a and 14b and shaded Brown on sheet 7 of the streets plan
Private Access	Between the reference points 15a and 15b and shaded Brown on sheet 8 of the streets plan
Private Access	Between the reference points 16a and 16b and shaded Brown on sheet 8 of the streets plan
Cowslams Lane	Between the reference points 16c and 16d and shaded Green on sheet 8 of the streets plan
B1249	Between the reference points 17a and 17b and shaded Green on sheets 8 and 9 of the streets

	plan
B1249	Between the reference points 17c and 17d and shaded Green on sheets 8 and 9 of the streets plan
Private Access	Between the reference points 18a and 18b and shaded Brown on sheets 8 and 9 of the streets plan
B1249	Between the reference points 18c and 18d and shaded Green on sheets 8 and 9 of the streets plan
Private Access	Between the reference points 19a and 19b and shaded Brown on sheet 10 of the streets plan
Rotsea Lane	Between the reference points 20a and 20b and shaded Green on sheet 11 of the streets plan
Rotsea Lane	Between the reference points 20c and 20d and shaded Green on sheet 11 of the streets plan
Private Access	At reference point 20e and shaded Brown on sheet 11 of the streets plan
Private Access	Between the reference points 21a and 21b and shaded Brown on sheet 12 of the streets plan
Private Access	Between the reference points 22a and 22b and shaded Brown on sheet 12 of the streets plan
Carr Lane	Between the reference points 23a and 23b and shaded Green on sheet 13 of the streets plan
Carr Lane	Between the reference points 24a and 24b and shaded Green on sheet 14 of the streets plan
Wilfholme Road	Between the reference points 25a and 25b and shaded Green on sheet 14 of the streets plan
Beswick Road	Between the reference points 26a and 26b and shaded Green on sheet 15 of the streets plan
Station Road	Between the reference points 27a and 27b and shaded Green on sheet 16 of the streets plan
A164	Between the reference points 28a and 28b and shaded Green on sheet 16 of the streets plan
Station Road	Between the reference points 29a and 29b and shaded Green on sheet 16 of the streets plan
A164	Between the reference points 30a and 30b and shaded Green on sheet 17 of the streets plan
Private Access	Between the reference points 31a and 31b and shaded Brown on sheet 17 of the streets plan
Private Access	Between the reference points 32a and 32b and shaded Brown on sheet 17 of the streets plan
Private Access	Between the reference points 33a and 33b and shaded Brown on sheet 18 of the streets plan
Private Access	Between the reference points 34a and 34b and shaded Brown on sheet 18 of the streets plan
Old Road	Between the reference points 34c and 34d and shaded Green on sheet 18 of the streets plan
Miles Lane	Between the reference points 35a and 35b and shaded Green on sheet 19 of the streets plan
Miles Lane	Between the reference points 35c and 35d and shaded Green on sheet 19 of the streets plan
Miles Lane	Between the reference points 36a and 36b and shaded Green on sheet 19 of the streets plan

Rose Lane	Between the reference points 37a and 37b and shaded Green on sheets 19 and 20 of the streets plan
Private Access	Between the reference points 38a and 38b and shaded Brown on sheet 20 of the streets plan
A1035	Between the reference points 39a and 39b and shaded Green on sheet 21 of the streets plan
Dogkennel Lane	Between the reference points 40a and 40b and shaded Green on sheet 21 of the streets plan
York Road	Between the reference points 41a and 41b and shaded Green on sheet 22 of the streets plan
York Road	Between the reference points 41c and 41d and shaded Green on sheet 22 of the streets plan
A1079	Between the reference points 42a and 42b and shaded Green on sheets 22 and 23 of the streets plan
Newbald Road	Between the reference points 43a and 43b and shaded Green on sheet 23 of the streets plan
Newbald Road	Between the reference points 43c and 43d and shaded Green on sheet 23 of the streets plan
Private Access	Between the reference points 44a and 44b and shaded Brown on sheet 23 of the streets plan
B1230	Between the reference points 45a and 45b and shaded Green on sheets 23 and 24 of the streets plan
Private Access	Between the reference points 46a and 46b and shaded Brown on sheet 24 of the streets plan
Coppleflat Lane	Between the reference points 47a and 47b and shaded Green on sheet 25 of the streets plan
Coppleflat Lane	Between the reference points 48a and 48b and shaded Green on sheet 25 of the streets plan
Coppleflat Lane	Between the reference points 49a and 49b and shaded Green on sheets 25 and 26 of the streets plan
Coppleflat Lane	Between the reference points 50a and 50b and shaded Green on sheets 25 and 26 of the streets plan
A164	Between the reference points 51a and 51b and shaded Green on sheets 25 and 26 of the streets plan
A164	Between the reference points 51c and 51d and shaded Green on sheets 25 and 26 of the streets plan
Private Access	Between the reference points 52a and 52b and shaded Brown on sheet 26 of the streets plan
Private Access	Between the reference points 53a and 53b and shaded Brown on sheet 28 of the streets plan
Private Access	Between the reference points 54a and 54b and shaded Brown on sheet 28 of the streets plan
A1079	Between the reference points 55a and 55b and shaded Green on sheet 27 of the streets plan

SCHEDULE 3
STREETS TO BE TEMPORARILY STOPPED UP

<i>(1)</i> <i>Public rights of way to be temporarily stopped up</i>	<i>(2)</i> <i>Extent of temporary stopping up</i>
Unnamed Road	Between the reference points 1a and 1b and shaded Green on sheet 1 of the streets plan
Sands Road	Between the reference points 1c and 1d and shaded Brown on sheet 1 of the streets plan
Private Access	Between the reference points 2a, 2b and 2c and shaded Brown on sheets 1 and 2 of the streets plan
Bridlington Road	Between the reference points 3a and 3b and shaded Green on sheets 2 and 3 of the streets plan
Gransmoor Road	Between the reference points 4a and 4b and shaded Green on sheets 3 and 4 of the streets plan
Private Access	Between the reference points 5a and 5b and shaded Brown on sheet 4 of the streets plan
Private Access	Between the reference points 6a and 6b and shaded Brown on sheet 4 of the streets plan
Private Access	Between the reference points 7a and 7b and shaded Brown on sheet 4 of the streets plan
Private Access	Between the reference points 8a and 8b and shaded Brown on sheets 4 and 5 of the streets plan
Lissett Lane	Between the reference points 8c and 8d and shaded Green on sheets 4 and 5 of the streets plan
Private Access	Between the reference points 9a and 9b and shaded Brown on sheet 5 of the streets plan
Private Access	Between the reference points 10a and 10b and shaded Brown on sheet 6 of the streets plan
Gembling Lane	Between the reference points 11a and 11b and shaded Green on sheet 6 of the streets plan
Old Howe Lane	Between the reference points 12a and 12b and shaded Green on sheets 6 and 7 of the streets plan
Main Street	Between the reference points 13a and 13b and shaded Green on sheet 7 of the streets plan
Private Access	Between the reference points 14a and 14b and shaded Brown on sheet 7 of the streets plan
Private Access	Between the reference points 15a and 15b and shaded Brown on sheet 8 of the streets plan
Private Access	Between the reference points 16a and 16b and shaded Brown on sheet 8 of the streets plan
Cowslams Lane	Between the reference points 16c and 16d and shaded Green on sheet 8 of the streets plan
B1249	Between the reference points 17a and 17b and

	shaded Green on sheets 8 and 9 of the streets plan
B1249	Between the reference points 17c and 17d and shaded Green on sheets 8 and 9 of the streets plan
Private Access	Between the reference points 18a and 18b and shaded Brown on sheets 8 and 9 of the streets plan
B1249	Between the reference points 18c and 18d and shaded Green on sheets 8 and 9 of the streets plan
Private Access	Between the reference points 19a and 19b and shaded Brown on sheet 10 of the streets plan
Rotsea Lane	Between the reference points 20a and 20b and shaded Green on sheet 11 of the streets plan
Rotsea Lane	Between the reference points 20c and 20d and shaded Green on sheet 11 of the streets plan
Private Access	At reference point 20e and shaded Brown on sheet 11 of the streets plan
Private Access	Between the reference points 21a and 21b and shaded Brown on sheet 12 of the streets plan
Private Access	Between the reference points 22a and 22b and shaded Brown on sheet 12 of the streets plan
Carr Lane	Between the reference points 23a and 23b and shaded Green on sheet 13 of the streets plan
Carr Lane	Between the reference points 24a and 24b and shaded Green on sheet 14 of the streets plan
Wilfholme Road	Between the reference points 25a and 25b and shaded Green on sheet 14 of the streets plan
Beswick Road	Between the reference points 26a and 26b and shaded Green on sheet 15 of the streets plan
Station Road	Between the reference points 27a and 27b and shaded Green on sheet 16b of the streets plan
A164	Between the reference points 28a and 28b and shaded Green on sheet 16b of the streets plan
Station Road	Between the reference points 29a and 29b and shaded Green on sheet 16 of the streets plan
A164	Between the reference points 30a and 30b and shaded Green on sheet 17 of the streets plan
Private Access	Between the reference points 31a and 31b and shaded Brown on sheet 17 of the streets plan
Private Access	Between the reference points 32a and 32b and shaded Brown on sheet 17 of the streets plan
Private Access	Between the reference points 33a and 33b and shaded Brown on sheet 18 of the streets plan
Private Access	Between the reference points 34a and 34b and shaded Brown on sheet 18 of the streets plan
Old Road	Between the reference points 34c and 34d and shaded Green on sheet 18 of the streets plan
Miles Lane	Between the reference points 35a and 35b and shaded Green on sheet 19 of the streets plan
Miles Lane	Between the reference points 35c and 35d and shaded Green on sheet 19 of the streets plan
Miles Lane	Between the reference points 36a and 36b and

	shaded Green on sheet 19 of the streets plan
Rose Lane	Between the reference points 37a and 37b and shaded Green on sheets 19 and 20 of the streets plan
Private Access	Between the reference points 38a and 38b and shaded Brown on sheet 20 of the streets plan
A1035	Between the reference points 39a and 39b and shaded Green on sheet 21 of the streets plan
Dogkennel Lane	Between the reference points 40a and 40b and shaded Green on sheet 21 of the streets plan
York Road	Between the reference points 41a and 41b and shaded Green on sheet 22 of the streets plan
York Road	Between the reference points 41c and 41d and shaded Green on sheet 22 of the streets plan
A1079	Between the reference points 42a and 42b and shaded Green on sheets 22 and 23 of the streets plan
Newbald Road	Between the reference points 43a and 43b and shaded Green on sheet 23 of the streets plan
Newbald Road	Between the reference points 43c and 43d and shaded Green on sheet 23 of the streets plan
Private Access	Between the reference points 44a and 44b and shaded Brown on sheet 23 of the streets plan
B1230	Between the reference points 45a and 45b and shaded Green on sheets 23 and 24 of the streets plan
Private Access	Between the reference points 46a and 46b and shaded Brown on sheet 24 of the streets plan
Coppleflat Lane	Between the reference points 47a and 47b and shaded Green on sheet 25 of the streets plan
Coppleflat Lane	Between the reference points 48a and 48b and shaded Green on sheet 25 of the streets plan
Coppleflat Lane	Between the reference points 49a and 49b and shaded Green on sheets 25 and 26 of the streets plan
Coppleflat Lane	Between the reference points 50a and 50b and shaded Green on sheets 25 and 26 of the streets plan
A164	Between the reference points 51a and 51b and shaded Green on sheets 25 and 26 of the streets plan
A164	Between the reference points 51c and 51d and shaded Green on sheets 25 and 26 of the streets plan
Private Access	Between the reference points 52a and 52b and shaded Brown on sheet 26 of the streets plan
Private Access	Between the reference points 53a and 53b and shaded Brown on sheet 28 of the streets plan
Private Access	Between the reference points 54a and 54b and shaded Brown on sheet 28 of the streets plan
A1079	Between the reference points 55a and 55b and shaded Green on sheet 27 of the streets plan

SCHEDULE 4
PUBLIC RIGHTS OF WAY TO BE STOPPED UP OR DIVERTED
AND ACCESS LAND

PART 1

PUBLIC RIGHTS OF WAY TO BE TEMPORARILY STOPPED UP

<i>(1)</i> <i>Public right of way to be temporarily stopped up</i>	<i>(2)</i> <i>Extent of temporary stopping up</i>
Barmston Footpath No. 4	Between points 1a and 1b as shown dashed on sheet 1 of the public rights of way plan
Barmston Footpath No. 3	Between points 2a and 2b as shown dashed on sheets 1 and 2 of the public rights of way plan
Barmston Footpath No. 2	Between points 3a and 3b as shown dashed on sheet 2 of the public rights of way plan
Foston on the Wolds Footpath No. 10	Between points 4a and 4b as shown dashed on sheet 6 of the public rights of way plan
Foston on the Wolds Footpath No. 12	Between points 5a and 5b as shown dashed on sheet 7 of the public rights of way plan
Foston on the Wolds Footpath No. 12	Between points 6a and 6b as shown dashed on sheet 8 of the public rights of way plan
Foston on the Wolds Bridleway No. 6	Between points 7a and 7b as shown dashed on sheet 10 of the public rights of way plan
Hutton Cranswick Footpath No. 10	Between points 8a and 8b as shown dashed on sheets 11 and 12 of the public rights of way plan
Watton Footpath No. 18	Between points 9a and 9b as shown dashed on sheet 12 of the public rights of way plan
Watton Bridleway No. 13	Between points 10a and 10b as shown dashed on sheet 13 of the public rights of way plan
Beswick Bridleway No. 23	Between points 11a and 11b as shown dashed on sheet 15 of the public rights of way plan
Lockington Footpath No. 8	Between points 12a and 12b as shown dashed on sheet 16a and 16b respectively of the public rights of way plan
Leconfield Footpath No. 1	Between points 13a and 13b as shown dashed on sheet 17 of the public rights of way plan
Leconfield Bridleway No. 2	Between points 14a and 14b as shown dashed on sheet 17 of the public rights of way plan
Leconfield Footpath No. 7	Between points 15a and 15b as shown dashed on sheets 17 and 18 of the public rights of way plan
Leconfield Footpath No. 7	Between points 15c and 15d as shown dashed on sheet 18 of the public rights of way plan
Leconfield Bridleway No. 9	Between points 16a and 16b as shown dashed on sheet 18 of the public rights of way plan
Leconfield Footpath No. 10	Between points 17a and 17b as shown dashed on sheet 18 of the public rights of way plan

Leconfield Footpath No. 10	Between points 17c and 17d as shown dashed on sheet 18 of the public rights of way plan
Leconfield Footpath No. 11	Between points 18a and 18b as shown dashed on sheet 18 of the public rights of way plan
Leconfield Bridleway No. 6	Between points 19a and 19b as shown dashed on sheet 18 of the public rights of way plan
Leconfield Bridleway No. 12	Between points 20a and 20b as shown dashed on sheet 18 of the public rights of way plan
Cherry Burton Footpath No. 2	Between points 21a and 21b as shown dashed on sheet 20 of the public rights of way plan
Cherry Burton Footpath No. 3	Between points 22a and 22b as shown dashed on sheet 20 of the public rights of way plan
Walkington Footpath No. 9 (Moor Lane)	Between points 23a and 23b as shown dashed on sheet 24 of the public rights of way plan
Rowley Footpath No.12	Between points 24a and 24b as shown dashed on sheets 25 and 26 of the public rights of way plan
Rowley Footpath No.12	Between points 24c and 24d as shown dashed on sheets 26 and 27 of the public rights of way plan
Skidby Footpath No. 16	Between points 25a and 25b as shown dashed on sheet 26 and 28 of the public rights of way plan
Skidby Footpath No. 16	Between points 25c and 25d as shown dashed on sheet 28 of the public rights of way plan
Skidby Footpath No. 17	Between points 26a and 26b as shown dashed on sheet 28 of the public rights of way plan
Rowley Bridleway No. 13	Between points 27a and 27b as shown dashed on sheet 27 of the public rights of way plan

PART 2

PUBLIC RIGHTS OF WAY TO BE PERMANENTLY DIVERTED

<i>(1)</i> <i>Public right of way to be diverted</i>	<i>(2)</i> <i>Extent of diversion</i>	<i>(2)</i> <i>Extent of substitute right of way</i>
Skidby Footpath No.16	Within area 1 shaded orange on sheet 28 of the public rights of way plan	602 m
Rowley Bridleway No. 13	Between points 27a and 27b dashed blue on sheet 27 of the public rights of way plan	358 m

PART 3

PUBLIC RIGHTS OF WAY TO BE TEMPORARILY DIVERTED

<i>(1)</i> <i>Public right of way to be diverted</i>	<i>(2)</i> <i>Extent of temporary diversion</i>	<i>(3)</i> <i>Extent of substitute right of way</i>
Barmston Footpath No. 4	Between points 1a and 1b as shown dashed on sheet 1 of the public rights of way plan	244 m

PART 4

ACCESS LAND WHERE PUBLIC RIGHTS OF WAY MAY BE TEMPORARILY SUSPENDED

<i>(1)</i> <i>Access Land subject to temporary prohibition or restriction of use</i>	<i>(2)</i> <i>Extent of temporary prohibition or restriction of use of access land</i>
England Coastal Path	Temporarily suspend access to the area shaded green on the public rights of way plan

SCHEDULE 5
ACCESS TO WORKS

<i>(1)</i> <i>Location of access</i>	<i>(2)</i> <i>Description of access</i>
Sands Road	Referenced OA_001 and hatched pink on sheet 1 of the access to works plan
Sands Road	Referenced AP_002 and shaded blue on sheet 1 of the access to works plan
Bridlington Road	Referenced AP_003 and shaded blue on sheets 2 and 3 of the access to works plan
Bridlington Road	Referenced AP_040 and shaded blue on sheets 2 and 3 of the access to works plan
Bridlington Road	Referenced OA_002 and shaded pink on sheet 3 of the access to works plan
Fisher Lane	Referenced OA_003 and shaded pink on sheet 4 of the access to works plan
Lissett Lane	Referenced AP_004 and shaded blue on sheets 4 and 5 of the access to works plan
Lissett Lane	Referenced OA_004 and hatched pink on sheets 4 and 5 of the access to works plan
Bridlington Road	Referenced OA_005 and shaded pink on sheet 5 of the access to works plan
Gembling Lane	Referenced OA_027 and shaded pink on sheet 6 of the access to works plan
Gembling Lane	Referenced OA_028 and shaded pink on sheet 6 of the access to works plan
Old Howe Lane	Referenced AP_005 and shaded blue on sheets 6 and 7 of the access to works plan
Old Howe Lane	Referenced AP_039 and shaded blue on sheets 6 and 7 of the access to works plan
Main Street	Referenced OA_029 and shaded pink on sheet 7 of the access to works plan
Cowslams Lane	Referenced AP_006 and shaded blue on sheet 8 of the access to works plan
Cowslams Lane	Referenced OA_006 and hatched pink on sheet 8 of the access to works plan
B1249	Referenced OA_007 and shaded pink on sheets 8 and 9 of the access to works plan
B1249	Referenced AP_007 and shaded blue on sheets 8 and 9 of the access to works plan
B1249	Referenced AP_008 and shaded blue on sheets 8 and 9 of the access to works plan
B1249	Referenced OA_008 and hatched pink on sheets 8 and 9 of the access to works plan
Private Access	Referenced AP_009 and shaded blue on sheet 10 of the access to works plan
Private Access	Referenced OA_009 and hatched pink on sheet 10 of the access to works plan
Rotsea Lane	Referenced AP_010 and shaded blue on sheet

	11 of the access to works plan
Rotsea Lane	Referenced AP_038 and shaded blue on sheet 11 of the access to works plan
Rotsea Lane	Referenced OA_010 and hatched pink on sheet 11 of the access to works plan
Rotsea Lane	Referenced OA_031 and shaded pink on sheet 11 of the access to works plan
Carr Lane	Referenced OA_011 and shaded pink on sheet 13 of the access to works plan
Carr Lane	Referenced OA_034 and shaded pink on sheet 13 of the access to works plan
Carr Lane	Referenced AP_011 and AP_037 and shaded blue on sheet 14 of the access to works plan
Wilfholme Road	Referenced OA_012 and shaded pink on sheet 14 of the access to works plan
Wilfholme Road	Referenced OA_013 and shaded pink on sheet 14 of the access to works plan
Wilfholme Road	Referenced AP_012 and AP_036 and shaded blue on sheet 14 of the access to works plan
Beswick Road	Referenced AP_013 and AP_035 and shaded blue on sheet 15 of the access to works plan
Station Road	Referenced OA_015 and shaded pink on sheet 16 of the access to works plan
Station Road	Referenced AP_014 and AP_034 and shaded blue on sheet 16 of the access to works plan
Station Road	Referenced OA_014 and hatched pink on sheet 16 of the access to works plan
Station Road	Referenced AP_015 and shaded blue on sheet 16 of the access to works plan
A164	Referenced AP_016 and shaded blue on sheet 17 of the access to works plan
A164	Referenced OA_017 and hatched pink on sheet 17 of the access to works plan
Old Road	Referenced AP_017 and shaded blue on sheet 18 of the access to works plan
Miles Lane	Referenced OA_018 and shaded pink on sheet 19 of the access to works plan
Miles Lane	Referenced AP_018 and shaded blue on sheet 19 of the access to works plan
Roase Lane	Referenced OA_019 and shaded pink on sheets 19 and 20 of the access to works plan
A1035	Referenced AP_020 and AP_032 and shaded blue on sheet 21 of the access to works plan
Dogkennel Lane	Referenced AP_021 and shaded blue on sheet 21 of the access to works plan
Dogkennel Lane	Referenced OA_020 and hatched pink on sheet 21 of the access to works plan
York Road	Referenced AP_022 and shaded blue on sheet 22 of the access to works plan
York Road	Referenced OA_021 and hatched pink on sheet 22 of the access to works plan
Killingwoldgraves Lane	Referenced OA_022 and shaded pink on sheets 22 and 23 of the access to works plan
Newbald Road	Referenced AP_023 and AP_024 and shaded

	blue on sheet 23 of the access to works plan
Newbald Road	Referenced OA_040 and hatched pink on sheet 23 of the access to works plan
Coppleflat Lane	Referenced OA_023 and hatched pink on sheet 25 of the access to works plan
Coppleflat Lane	Referenced AP_027 and shaded blue on sheet 25 of the access to works plan
Coppleflat Lane	Referenced OA_024 and shaded pink on sheets 25 and 26 of the access to works plan
Coppleflat Lane	Referenced AP_030 and shaded blue on sheets 25 and 26 of the access to works plan
Coppleflat Lane	Referenced OA_025 and hatched pink on sheets 25 and 26 of the access to works plan
Coppleflat Lane	Referenced AP_028 and shaded blue on sheets 25 and 26 of the access to works plan
A164	Referenced AP_026 and shaded blue on sheet 26 of the access to works plan
A1079	Referenced OA_043 and hatched pink on sheet 27 of the access to works plan
A1079	Referenced AP_025 and hatched blue on sheet 27 of the access to works plan

SCHEDULE 6

LAND IN WHICH ONLY NEW RIGHTS ETC., MAY BE ACQUIRED

<i>(1)</i> <i>Number of land shown on land plans</i>	<i>(2)</i> <i>Purpose for which rights may be acquired and restrictions imposed</i>
1 2 2A 3 3A 4 4A 10 11 12 13 18	Rights to install, retain, use, maintain, inspect, alter, remove, refurbish, reconstruct, replace, protect and improve underground electricity cables, jointing bays, ducting, telecommunications and other ancillary apparatus (including but not limited to access chambers, manholes and marker posts) and any other works as necessary together with the right to fell, trim or lop trees and bushes which may obstruct or interfere with the said cables, telecommunications and other ancillary apparatus
19 20 21 27 28 29	Rights to pass and repass on foot, with or without vehicles, plant and machinery (including rights to lay and use any temporary surface) for all purposes in connection with the construction, use, maintenance and decommissioning of the authorised development
30 31 32	Rights to continuous vertical and lateral support for the authorised development
33 36 37 38 39	Rights to install, retain, use, maintain, inspect, alter, remove, refurbish, reconstruct, replace, protect and improve sewers, drains, pipes, ducts, mains, conduits, services, flues and to drain into and manage waterflows in any drains, watercourses and culverts

40	Rights to install, execute, implement, retain, repair, improve, renew, remove, relocate and plant trees, woodlands, shrubs, hedgerows, seeding, landscaping and other ecological measures together with the right to maintain, inspect and replant such trees, shrubs, hedgerows, landscaping and other ecological measures the right to pass and repass on foot, with or without vehicles, plant and machinery for all purposes in connection with the implementation and maintenance of landscaping and ecological mitigation or enhancement works
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78	Rights to install, retain, use, maintain, inspect, alter, remove, refurbish, reconstruct, replace, protect and improve security fencing, gates, boundary treatment, public rights of way and any other ancillary apparatus and any other works as necessary
86	Restrictions on erecting buildings or structures, altering ground levels, planting trees or carrying out operations or actions (including but not limited to blasting and piling) which may obstruct, interrupt, or interfere with the exercise of the rights or damage the authorised development
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1 2 2A 3 3A 4 4A	Rights to ground and lay anchor for vessels within the Order land
308 309 310 315 316 317 318 323 330 332 333 335 336 337 338 339 340 341 342 343 344	<p>Rights to install, retain, use, maintain, inspect, alter, remove, refurbish, reconstruct, replace, protect and improve pipes, ducts, mains, wires, cables, conduits, flues, fibre optic cables and other conducting media of whatsoever nature</p> <p>Restrictions on erecting buildings or structures, altering ground levels, planting trees or carrying out operations or actions (including but not limited to blasting and piling) which may obstruct, interrupt, or interfere with the exercise of the rights or damage the authorised development</p>

345 346 347 348 349 350 351 352 353 354 355 356	
14 17 25 26 35 45 46 47 56 57 80 84 92 99 100 104 113 114 117 123 134 135 151 163 165 186 187 192 203 206 209 230 237 250 255 258 268 269 290 296	<p>Rights to use, maintain and improve a permanent means of access including visibility splays and bridges</p> <p>Rights to install, retain, use, maintain, inspect, alter, remove, refurbish, reconstruct, replace, protect and improve security fencing, gates, boundary treatment, public rights of way and any other ancillary apparatus and any other works as necessary</p> <p>Rights to pass and repass on foot, with or without vehicles, plant and machinery for all purposes in connection with the construction, use, maintenance and decommissioning of the authorised development</p> <p>Rights to install, execute, implement, retain, repair, improve, renew, remove, relocate and plant trees, woodlands, shrubs, hedgerows, seeding, landscaping and other ecological measures together with the right to maintain, inspect and replant such trees, shrubs, hedgerows, landscaping and other ecological measures the right to pass and repass on foot, with or without vehicles, plant and machinery for all purposes in connection with the implementation and maintenance of landscaping and ecological mitigation or enhancement works</p> <p>Restrictions on erecting buildings or structures, altering ground levels, planting trees or carrying out operations or actions (including but not limited to blasting and piling) which may obstruct, interrupt, or interfere with the exercise of the rights</p>

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23 25 34 55 91 98 138 152 162 164 185 193 203 206 229 236 247 255 267 287 295 302	Rights to pass and repass on foot, with or without vehicles, plant and machinery (including rights to lay and use any temporary surface) for all purposes in connection with the construction, use, maintenance and decommissioning of the authorised development Rights to install, retain, use, maintain, inspect, alter, remove, refurbish, reconstruct, replace, protect and improve security fencing, gates, boundary treatment, public rights of way and any other ancillary apparatus and any other works as necessary Rights to install, execute, implement, retain, repair, improve, renew, remove, relocate and plant trees, woodlands, shrubs, hedgerows, seeding, landscaping and other ecological measures together with the right to maintain, inspect and replant such trees, shrubs, hedgerows, landscaping and other ecological measures the right to pass and repass on foot, with or without vehicles, plant and machinery for all purposes in connection with the implementation and maintenance of landscaping and ecological mitigation or enhancement works Restrictions on erecting buildings or structures, altering ground levels, planting trees or carrying out operations or actions (including but not limited to blasting and piling) which may obstruct, interrupt, or interfere with the exercise of the rights
323 330 332 333	Rights to construct, use, maintain and improve a permanent means of access including visibility splays Rights to pass and repass on foot, with or without vehicles, plant and machinery (including rights to lay and use any temporary surface) for all purposes in connection with the construction, use, maintenance and decommissioning of the authorised development Rights to install, retain, use, maintain, inspect,

	alter, remove, refurbish, reconstruct, replace, protect and improve pipes, ducts, mains, wires, cables, conduits, flues, fibre optic cables and other conducting media of whatsoever nature
	Rights to install, retain, use, maintain, inspect, alter, remove, refurbish, reconstruct, replace, protect and improve security infrastructure including cameras, perimeter fencing, fencing, gates and any other security measures or ancillary apparatus required in order to ensure an appropriate level of security in respect of the authorised development
	Rights to install, execute, implement, retain, repair, improve, renew, remove, relocate and plant trees, woodlands, shrubs, hedgerows, seeding, landscaping and other ecological measures together with the right to maintain, inspect and replant such trees, shrubs, hedgerows, landscaping and other ecological measures the right to pass and repass on foot, with or without vehicles, plant and machinery for all purposes in connection with the implementation and maintenance of landscaping and ecological mitigation or enhancement works
	Rights to install, retain, use, maintain, inspect, alter, remove, refurbish, reconstruct, replace, protect and improve any boundary treatment, public rights of way and any other ancillary apparatus and any other works as necessary
	Restrictions on erecting buildings or structures, altering ground levels, planting trees or carrying out operations or actions (including but not limited to blasting and piling) which may obstruct, interrupt, or interfere with the exercise of the rights
340 341 342 343 344 345 346 347 348 349 350	Rights to install, retain, use, maintain, inspect, alter, remove, refurbish, reconstruct, replace, protect and improve electricity poles, overhead electricity lines, underground electricity cables, telecommunications and all equipment and other ancillary apparatus (including but not limited to the use of scaffolding) and any other works as necessary together with the right to fell, trim or lop trees and bushes which may obstruct or interfere with the said poles, lines, telecommunications and other equipment and ancillary apparatus

351	Restrictions on erecting buildings or structures, altering ground levels, planting trees or carrying out operations or actions (including but not limited to blasting and piling) which may obstruct, interrupt, or interfere with the exercise of the rights or damage the authorised development
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SCHEDULE 7

MODIFICATION OF COMPENSATION AND COMPULSORY PURCHASE ENACTMENTS FOR CREATION OF NEW RIGHTS

1. The enactments for the time being in force with respect to compensation for the compulsory purchase of land apply, with the necessary modifications as respects compensation, in the case of a compulsory acquisition under this Order of a right by the creation of a new right or the imposition of a restrictive covenant as they apply as respects compensation on the compulsory purchase of land and interests in land.

2.—(1) Without limitation on the scope of paragraph 1, the Land Compensation Act 1973^(a) has effect subject to the modifications set out in sub-paragraph (2).

(2) In section 44(1) (compensation for injurious affection), as it applies to compensation for injurious affection under section 7 (measure of compensation in case of severance) of the 1965 Act as substituted by paragraph 5—

- (a) for the words “land is acquired or taken from” there is substituted the words “a right or restrictive covenant over land is purchased from or imposed on”; and
- (b) for the words “acquired or taken from him” there is substituted the words “over which the right is exercisable or the restrictive covenant enforceable”.

3.—(1) Without limitation on the scope of paragraph 1, the 1961 Act has effect subject to the modification set out in sub-paragraph (2).

(2) For section 5A(5A) (relevant valuation date) of the 1961 Act substitute—

“(5A) If—

- (a) the acquiring authority enters on land for the purpose of exercising a right in pursuance of a notice of entry under section 11(1) (powers of entry) of the 1965 Act (as modified by paragraph 7 of Schedule 7 to the Hornsea Four Offshore Wind Farm Order 202[]; and
- (b) the acquiring authority is subsequently required by a determination under paragraph 12 of Schedule 2A (counter-notice requiring purchase of land not in notice to treat) to the 1965 Act (as substituted by paragraph 10 of Schedule 7 to the Hornsea Four Wind Farm Order 202[] to acquire an interest in the land, and
- (c) the acquiring authority enters on and takes possession of that land,

the authority is deemed for the purposes of subsection (3)(a) to have entered on that land where it entered on that land for the purpose of exercising that right.”.

Application of Part 1 of the 1965 Act

4.—(1) The 1965 Act is to have effect with the modifications necessary to make it apply to the compulsory acquisition under this Order of a right by the creation of a new right, or to the imposition under this Order of a restrictive covenant, as it applies to the compulsory acquisition under this Order of land, so that, in appropriate contexts, references in that Act to land are read (according to the requirements of the particular context) as referring to, or as including references to—

- (a) the right acquired or to be acquired, or the restriction imposed or to be imposed; or
- (b) the land over which the right is or is to be exercisable, or the restriction is to be enforceable.

(a) 1973 c.26.

(2) Without limitation on the scope of sub-paragraph (1), Part 1 of the 1965 Act applies in relation to the compulsory acquisition under this Order of a right by the creation of a new right or, in relation to the imposition of a restriction, with the modifications specified in the following provisions of this Schedule.

5. For section 7 (measure of compensation in the case of severance) of the 1965 Act there is substituted the following section—

“**7.** In assessing the compensation to be paid by the acquiring authority under this Act, regard shall be had not only to the extent (if any) to which the value of the land over which the right is to be acquired or the restrictive covenant is to be imposed is depreciated by the acquisition of the right or the imposition of the covenant but also to the damage (if any) to be sustained by the owner of the land by reason of its severance from other land of the owner, or injuriously affecting that other land by the exercise of the powers conferred by this or the special Act.”.

6. The following provisions of the 1965 Act (which state the effect of a deed poll executed in various circumstances where there is no conveyance by persons with interests in the land), that is to say—

- (a) section 9(4) (refusal to convey, failure to make title, etc);
- (b) paragraph 10(3) of Schedule 1 (persons without power to sell their interests) (conveyance of the land or interest);
- (c) paragraph 2(3) of Schedule 2 (absent and untraced owners); and
- (d) paragraphs 2(3) and 7(2) of Schedule 4 (common land),

are so modified as to secure that, as against persons with interests in the land which are expressed to be overridden by the deed, the right which is to be compulsorily acquired or the restrictive covenant which is to be imposed is vested absolutely in the acquiring authority.

7. Section 11 (powers of entry) of the 1965 Act is so modified as to secure that, as from the date on which the acquiring authority has served notice to treat in respect of any right or restrictive covenant, as well as the notice of entry required by subsection (1) of that section (as it applies to compulsory acquisition under article 20), it has power, exercisable in equivalent circumstances and subject to equivalent conditions, to enter for the purpose of exercising that right or enforcing that restrictive covenant (which is deemed for this purpose to have been created on the date of service of the notice); and sections 11A (powers of entry: further notices of entry), 11B (counter-notice requiring possession to be taken on specified date), 12 (penalty for unauthorised entry) and 13 (refusal to give possession to acquiring authority) of the 1965 Act is modified correspondingly.

8. Section 20 (protection for interests of tenants at will, etc.) of the 1965 Act applies with the modifications necessary to secure that persons with such interests in land as are mentioned in that section are compensated in a manner corresponding to that in which they would be compensated on a compulsory acquisition under this Order of that land, but taking into account only the extent (if any) of such interference with such an interest as is actually caused, or likely to be caused, by the exercise of the right or the enforcement of the restrictive covenant in question.

9. Section 22 (interest omitted from purchase) of the 1965 Act as modified by article 29(3) is so modified as to enable the acquiring authority, in circumstances corresponding to those referred to in that section, to continue to be entitled to exercise the right acquired or enforce the restrictive covenant imposed, subject to compliance with that section as respects compensation.

10. For Schedule 2A to the 1965 Act substitute—

“SCHEDULE 2A COUNTER-NOTICE REQUIRING PURCHASE OF LAND

Introduction

1.—(1) This Schedule applies where an acquiring authority serve a notice to treat in respect of a right over, or restrictive covenant affecting, the whole or part of a house, building or factory and have not executed a general vesting declaration under section 4 (execution of declaration) of the 1981 Act as applied by article 23 (application of the Compulsory Purchase (Vesting Declarations) Act 1981) of the Hornsea Four Offshore Wind Farm Order 202[] in respect of the land to which the notice to treat relates.

(2) But see article 25(3) (acquisition of subsoil only) of the Hornsea Four Offshore Wind Farm Order 202[] which excludes the acquisition of subsoil only from this Schedule.

2. In this Schedule, “house” includes any park or garden belonging to a house.

Counter-notice requiring purchase of land

3. A person who is able to sell the house, building or factory (“the owner”) may serve a counter-notice requiring the authority to purchase the owner’s interest in the house, building or factory.

4. A counter-notice under paragraph 3 must be served within the period of 28 days beginning with the day on which the notice to treat was served.

Response to counter-notice

5. On receiving a counter-notice, the acquiring authority must decide whether to—

- (a) withdraw the notice to treat,
- (b) accept the counter-notice, or
- (c) refer the counter-notice to the Upper Tribunal.

6. The authority must serve notice of their decision on the owner within the period of 3 months beginning with the day on which the counter-notice is served (“the decision period”).

7. If the authority decide to refer the counter-notice to the Upper Tribunal they must do so within the decision period.

8. If the authority do not serve notice of a decision within the decision period they are to be treated as if they had served notice of a decision to withdraw the notice to treat at the end of that period.

9. If the authority serve notice of a decision to accept the counter-notice, the compulsory purchase order and the notice to treat are to have effect as if they included the owner’s interest in the house, building or factory.

Determination by the Upper Tribunal

10. On a referral under paragraph 7, the Upper Tribunal must determine whether the acquisition of the right or the imposition of the restrictive covenant would—

- (a) in the case of a house, building or factory, cause material detriment to the house, building or factory, or
- (b) in the case of a park or garden, seriously affect the amenity or convenience of the house to which the park or garden belongs.

11. In making its determination, the Upper Tribunal must take into account—

- (a) the effect of the acquisition of the right or the imposition of the covenant,
- (b) the use to be made of the right or covenant proposed to be acquired or imposed, and
- (c) if the right or covenant is proposed to be acquired or imposed for works or other purposes extending to other land, the effect of the whole of the works and the use of the other land.

12. If the Upper Tribunal determines that the acquisition of the right or the imposition of the covenant would have either of the consequences described in paragraph 10, it must determine how much of the house, building or factory the authority ought to be required to take.

13. If the Upper Tribunal determines that the authority ought to be required to take some or all of the house, building or factory, the compulsory purchase order and the notice to treat are to have effect as if they included the owner's interest in that land.

14.—(1) If the Upper Tribunal determines that the authority ought to be required to take some or all of the house, building or factory, the authority may at any time within the period of 6 weeks beginning with the day on which the Upper Tribunal makes its determination withdraw the notice to treat in relation to that land.

(2) If the acquiring authority withdraw the notice to treat under this paragraph they must pay the person on whom the notice was served compensation for any loss or expense caused by the giving and withdrawal of the notice.

(3) Any dispute as to the compensation is to be determined by the Upper Tribunal.”.

SCHEDULE 8

LAND OF WHICH TEMPORARY POSSESSION MAY BE TAKEN

<i>(1)</i> Area	<i>(2)</i> Number of land shown on land plan	<i>(3)</i> Purpose for which temporary possession may be taken
East Riding of Yorkshire	5	Temporary use for access to facilitate construction for Work Nos. 5 and 6
East Riding of Yorkshire	6	Temporary use for access to facilitate construction for Work Nos. 5 and 6
East Riding of Yorkshire	6A	Temporary use for access to facilitate construction for Work Nos. 5 and 6
East Riding of Yorkshire	7	Temporary use for access to facilitate construction for Work Nos. 5 and 6
East Riding of Yorkshire	8	Temporary use for access to facilitate construction for Work Nos. 5 and 6
East Riding of Yorkshire	9	Temporary use for access to facilitate construction for Work Nos. 5 and 6
East Riding of Yorkshire	15	Temporary use for access to facilitate construction for Work Nos. 5 and 6
East Riding of Yorkshire	16	Temporary use for access to facilitate construction for Work Nos. 5 and 6
East Riding of Yorkshire	22	Temporary use (including for access and logistics compound) to facilitate construction for Work No. 6
East Riding of Yorkshire	24	Temporary use (including for access and logistics compound) to facilitate construction for Work No. 6
East Riding of Yorkshire	42	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	43	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	44	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	48	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	49	Temporary use for access to

		facilitate construction for Work No. 6
East Riding of Yorkshire	50	Temporary use (including for access and logistics compound) to facilitate construction for Work No. 6
East Riding of Yorkshire	67	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	79	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	81	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	82	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	83	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	85	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	89	Temporary use (including for access and logistics compound) to facilitate construction for Work No. 6
East Riding of Yorkshire	90	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	97	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	101	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	102	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	103	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	105	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	112	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	115	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	116	Temporary use for access to facilitate construction for Work No. 6

East Riding of Yorkshire	118	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	119	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	120	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	121	Temporary use (including access and bridge inspection, monitoring, maintenance and improvements) to facilitate construction for Work No. 6
East Riding of Yorkshire	122	Temporary use (including access and bridge inspection, monitoring, maintenance and improvements) to facilitate construction for Work No. 6
East Riding of Yorkshire	124	Temporary use (including access and bridge inspection, monitoring, maintenance and improvements) to facilitate construction for Work No. 6
East Riding of Yorkshire	125	Temporary use (including access and bridge inspection, monitoring, maintenance and improvements) to facilitate construction for Work No. 6
East Riding of Yorkshire	131	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	132	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	133	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	136	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	137	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	154	Temporary use (including for logistics compound) to facilitate construction for Work No. 6
East Riding of Yorkshire	197	Temporary use (including for access and logistics compound) to facilitate construction for Work No. 6
East Riding of Yorkshire	198	Temporary use for access to facilitate construction for Work No. 6

East Riding of Yorkshire	202	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	204	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	205	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	207	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	208	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	210	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	217	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	218	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	219	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	220	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	221	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	222	Temporary use (including for access and logistics compound) to facilitate construction for Work No. 6
East Riding of Yorkshire	224	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	225	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	226	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	231	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	232	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	246	Temporary use for access to facilitate construction for Work No. 6

East Riding of Yorkshire	248	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	249	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	251	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	256	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	257	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	259	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	260	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	261	Temporary use (including for logistics compound) to facilitate construction for Work No. 6
East Riding of Yorkshire	270	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	271	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	286	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	288	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	289	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	291	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	297	Temporary use (including for logistics compound) to facilitate construction for Work No. 6
East Riding of Yorkshire	301	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	303	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	304	Temporary use for access to facilitate construction for

		Work No. 6
East Riding of Yorkshire	306	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	311	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	312	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	313	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	314	Temporary use for access to facilitate construction for Work No. 6
East Riding of Yorkshire	319	Temporary use (including for access and logistics compound) to facilitate construction for Work Nos. 6, 7, 8 and 10
East Riding of Yorkshire	321	Temporary use for access to facilitate construction for Work Nos. 6, 7, 8 and 10
East Riding of Yorkshire	324	Temporary use for access to facilitate construction for Work Nos. 6, 7, 8 and 10
East Riding of Yorkshire	325	Temporary use for access to facilitate construction for Work Nos. 6, 7, 8 and 10

SCHEDULE 9

PROTECTIVE PROVISIONS

PART 1

PROTECTION FOR ELECTRICITY, GAS, WATER AND SEWERAGE UNDERTAKERS

Application

1. For the protection of the affected undertakers referred to in this Part of this Schedule (save for National Grid which is protected by Part 3 of this Schedule and Northern Powergrid which is protected by Part 11 of this Schedule) the following provisions must, unless otherwise agreed in writing between the undertaker and the affected undertaking concerned, have effect.

2. In this Part of this Schedule—

“affected undertaker” means

- (a) any licence holder within the meaning of Part 1 (electricity supply) of the 1989 Act;
- (b) a gas transporter within the meaning of Part 1 (gas supply) of the Gas Act 1986(a);
- (c) a water undertaker within the meaning of the Water Industry Act 1991(b);
- (d) a sewerage undertaker within the meaning of Part 1 (preliminary) of the Water Industry Act 1991(c),

for the area of the authorised development but, for the avoidance of doubt, does not include the undertakers specified in Part 3 or Part 11 of this Schedule, and in relation to any apparatus, means the undertaker to whom it belongs or by whom it is maintained;

“alternative apparatus” means alternative apparatus adequate to enable the affected undertaker in question to fulfil its statutory functions in a manner no less efficient than previously;

“apparatus” means—

- (a) in the case of an electricity undertaker, electric lines or electrical plant (as defined in the 1989 Act), belonging to or maintained by that affected undertaker;
- (b) in the case of a gas undertaker, any mains, pipes or other apparatus belonging to or maintained by a gas transporter for the purposes of gas supply;
- (c) in the case of a water undertaker—
 - (i) mains, pipes or other apparatus belonging to or maintained by that affected undertaker for the purposes of water supply; and
 - (ii) any water mains or service pipes (or part of a water main or service pipe) that is the subject of an agreement to adopt made under section 51A (agreements to adopt water main or service pipe at future date) of the Water Industry Act 1991;
- (d) in the case of a sewerage undertaker—
 - (i) any drain or works vested in the affected undertaker in accordance with the Water Industry Act 1991; and
 - (ii) any sewer which is so vested or is the subject of a notice of intention to adopt given under section 102(4) (adoption of sewers and disposal works) of that Act or an

(a) 1986 c.44. A new section 7 was substituted by section 5 of the Gas Act 1995 (c.45), and was further amended by section 76 of the Utilities Act 2000 (c.27).

(b) 1991 c.56.

(c) 1991 c.56.

agreement to adopt made under section 104 (agreements to adopt sewer, drain or sewerage disposal works, at future date) of that Act,

and includes a sludge main, disposal main (within the meaning of section 219 (general interpretation) of that Act) or sewer outfall and any manholes, ventilating shafts, pumps or other accessories forming part of any such sewer, drain or works, and includes any structure in which apparatus is or is to be lodged or which gives or will give access to apparatus;

“functions” includes powers and duties; and

“in” in a context referring to apparatus or alternative apparatus in land includes a reference to apparatus or alternative apparatus under, over or upon land.

Precedence of the 1991 Act in respect of apparatus in the streets

3. This Part of this Schedule does not apply to apparatus in respect of which the relations between the undertaker and the affected undertaker are regulated by the provisions of Part 3 (street works in England and Wales) of the 1991 Act.

No acquisition etc. except by agreement

4. Regardless of any provision in this Order or anything shown on the land plans, the undertaker must not acquire any apparatus otherwise than by agreement.

Removal of apparatus

5.—(1) If, in the exercise of the powers conferred by this Order, the undertaker acquires any interest in any land in which any apparatus is placed, that apparatus must not be removed under this Part of this Schedule and any right of an affected undertaker to maintain that apparatus in that land must not be extinguished until alternative apparatus has been constructed and is in operation to the reasonable satisfaction of the affected undertaker in question.

(2) If, for the purpose of executing any works in, on or under any land purchased, held, or used under this Order, the undertaker requires the removal of any apparatus placed in that land, it must give to the affected undertaker in question written notice of that requirement, together with a plan and section of the work proposed, and of the proposed position of the alternative apparatus to be provided or constructed and in that case (or if in consequence of the exercise of any of the powers conferred by this Order an affected undertaker reasonably needs to remove any of its apparatus) the undertaker must, subject to sub-paragraph (3), afford to the affected undertaker the necessary facilities and rights for the construction of alternative apparatus in other land of the undertaker and subsequently for the maintenance of that apparatus.

(3) If alternative apparatus or any part of such apparatus is to be constructed elsewhere than in other land of the undertaker, or the undertaker is unable to afford such facilities and rights as are mentioned in sub-paragraph (2), in the land in which the alternative apparatus or part of such apparatus is to be constructed, the affected undertaker in question must, on receipt of a written notice to that effect from the undertaker, as soon as reasonably possible use reasonable endeavours to obtain the necessary facilities and rights in the land in which the alternative apparatus is to be constructed.

(4) Any alternative apparatus to be constructed in land of the undertaker under this Part of this Schedule must be constructed in such manner and in such line or situation as may be agreed between the affected undertaker in question and the undertaker or in default of agreement settled by arbitration in accordance with article 39 (arbitration).

(5) The affected undertaker in question must, after the alternative apparatus to be provided or constructed has been agreed or settled by arbitration in accordance with article 39 (arbitration) and after the grant to the affected undertaker of any such facilities and rights as are referred to in sub-paragraph (2) or (3), proceed without unnecessary delay to construct and bring into operation the alternative apparatus and subsequently to remove any apparatus required by the undertaker to be removed under the provisions of this Part of this Schedule.

(6) Regardless of anything in sub-paragraph (5), if the undertaker gives notice in writing to the affected undertaker in question that it desires itself to execute any work, or part of any work in connection with the construction or removal of apparatus in any land controlled by the undertaker, that work, instead of being executed by the affected undertaker, must be executed by the undertaker without unnecessary delay under the superintendence, if given, and to the reasonable satisfaction of the affected undertaker.

(7) Nothing in sub-paragraph (6) authorises the undertaker to execute the placing, installation, bedding, packing, removal, connection or disconnection of any apparatus, or execute any filling around the apparatus (where the apparatus is laid in a trench) within 300 millimetres of the apparatus.

Facilities and rights for alternative apparatus

6.—(1) Where, in accordance with the provisions of this Part of this Schedule, the undertaker affords to an affected undertaker facilities and rights for the construction and maintenance in land of the undertaker of alternative apparatus in substitution for apparatus to be removed, those facilities and rights must be granted upon such terms and conditions as may be agreed between the undertaker and the affected undertaker in question or in default of agreement settled by arbitration in accordance with article 39 (arbitration).

(2) If the facilities and rights to be afforded by the undertaker in respect of any alternative apparatus, and the terms and conditions subject to which those facilities and rights are to be granted, are in the opinion of the arbitrator less favourable on the whole to the affected undertaker in question than the facilities and rights enjoyed by it in respect of the apparatus to be removed and the terms and conditions to which those facilities and rights are subject, the arbitrator must make such provision for the payment of compensation by the undertaker to that affected undertaker as appears to the arbitrator to be reasonable having regard to all the circumstances of the particular case.

Retained apparatus

7.—(1) Not less than 28 days before starting the execution of any works of the type referred to in paragraph 5 that are near to, or will or may affect, any apparatus the removal of which has not been required by the undertaker under paragraph 5, the undertaker must submit to the affected undertaker in question a plan, section and description of the works to be executed.

(2) Those works must be executed only in accordance with the plan, section and description submitted under sub-paragraph (1) and in accordance with such reasonable requirements as may be made in accordance with sub-paragraph (3) by the affected undertaker for the alteration or otherwise for the protection of the apparatus, or for securing access to it, and the affected undertaker is entitled to watch and inspect the execution of those works.

(3) Any requirements made by an affected undertaker under sub-paragraph (2) must be made within a period of 21 days beginning with the date on which a plan, section and description under sub-paragraph (1) are submitted to it.

(4) If an affected undertaker in accordance with sub-paragraph (2) and in consequence of the works proposed by the undertaker, reasonably requires the removal of any apparatus and gives written notice to the undertaker of that requirement, paragraphs 1 to 6 apply as if the removal of the apparatus had been required by the undertaker under paragraph 5.

(5) Nothing in this paragraph precludes the undertaker from submitting at any time or from time to time, but in no case less than 28 days before commencing the execution of any works, a new plan, section and description instead of the plan, section and description previously submitted, and having done so the provisions of this paragraph apply to and in respect of the new plan, section and description.

(6) The undertaker is not required to comply with sub-paragraph (1) in a case of emergency but in that case it must give to the affected undertaker in question notice as soon as is reasonably practicable and a plan, section and description of those works as soon as reasonably practicable

subsequently and must comply with sub-paragraph (2) in so far as is reasonably practicable in the circumstances.

8.—(1) Subject to the following provisions of this paragraph, the undertaker must repay to an affected undertaker the reasonable expenses incurred by that affected undertaker in, or in connection with, the inspection, removal, alteration or protection of any apparatus or the construction of any new apparatus which may be required in consequence of the execution of any such works as are referred to in paragraph 5.

(2) There must be deducted from any sum payable under sub-paragraph (1) the value of any apparatus removed under the provisions of this Part of this Schedule, that value being calculated after removal.

(3) If in accordance with the provisions of this Part of this Schedule—

- (a) apparatus of better type, of greater capacity or of greater dimensions is placed in substitution for existing apparatus of worse type, of smaller capacity or of smaller dimensions; or
- (b) apparatus (whether existing apparatus or apparatus substituted for existing apparatus) is placed at a depth greater than the depth at which the existing apparatus was,

and the placing of apparatus of that type or capacity or of those dimensions or the placing of apparatus at that depth, as the case may be, is not agreed by the undertaker or, in default of agreement, is not determined by arbitration in accordance with article 39 (arbitration) to be necessary, then, if such placing involves cost in the construction of works under this Part of this Schedule exceeding that which would have been involved if the apparatus placed had been of the existing type, capacity or dimensions, or at the existing depth, as the case may be, the amount which apart from this sub-paragraph would be payable to the affected undertaker in question by virtue of sub-paragraph (1) must be reduced by the amount of that excess.

(4) For the purposes of sub-paragraph (2)—

- (a) an extension of apparatus to a length greater than the length of existing apparatus is not to be treated as a placing of apparatus of greater dimensions than those of the existing apparatus; and
- (b) where the provision of a joint in a cable is agreed, or is determined to be necessary, the consequential provision of a jointing chamber or of a manhole is to be treated as if it also had been agreed or had been so determined.

(5) An amount which apart from this sub-paragraph would be payable to an affected undertaker in respect of works by virtue of sub-paragraph (1) must, if the works include the placing of apparatus provided in substitution for apparatus placed more than 7 years and 6 months earlier so as to confer on the affected undertaker any financial benefit by deferment of the time for renewal of the apparatus in the ordinary course, be reduced by the amount which represents that benefit.

Expenses and costs

9.—(1) Subject to sub-paragraphs (2) and (3), if by reason or in consequence of the construction of any such works referred to in paragraph 5, any damage is caused to any apparatus (other than apparatus the repair of which is not reasonably necessary in view of its intended removal for the purposes of those works) or property of an affected undertaker, or there is any interruption in any service provided, or in the supply of any goods, by any affected undertaker, the undertaker must—

- (a) bear and pay the cost reasonably incurred by that affected undertaker in making good such damage or restoring the supply; and
- (b) make reasonable compensation to that affected undertaker for any other expenses, loss, damages, penalty or costs incurred by the affected undertaker,

by reason or in consequence of any such damage or interruption.

(2) Nothing in sub-paragraph (1) imposes any liability on the undertaker with respect to any damage or interruption to the extent that it is attributable to the act, neglect or default of an affected undertaker, its officers, servants, contractors or agents.

(3) An affected undertaker must give the undertaker reasonable notice of any such claim or demand and no settlement or compromise may be made without the consent of the undertaker which, if it withholds such consent, shall have the sole conduct of any settlement or compromise or of any proceedings necessary to resist the claim or demand.

10. Nothing in this Part of this Schedule affects the provisions of any enactment or agreement regulating the relations between the undertaker and an affected undertaker in respect of any apparatus laid or erected in land belonging to the undertaker on the date on which this Order is made.

PART 2

PROTECTION FOR OPERATORS OF ELECTRONIC COMMUNICATIONS CODE NETWORKS

1. For the protection of any operator, the following provisions, unless otherwise agreed in writing between the undertaker and the operator, have effect.

2. In this Part of this Schedule—

“conduit system” has the same meaning as in the electronic communications code and references to providing a conduit system is construed in accordance with paragraph 1(3A) of that code;

“electronic communications apparatus” has the same meaning as in the electronic communications code;

“the electronic communications code” has the same meaning as in Chapter 1 of Part 2 of the 2003 Act(a);

“electronic communications code network” means—

- (a) so much of an electronic communications network or conduit system provided by an electronic communications code operator as is not excluded from the application of the electronic communications code by a direction under section 106 of the 2003 Act; and
- (b) an electronic communications network which the Secretary of State is providing or proposing to provide;

“electronic communications code operator” means a person in whose case the electronic communications code is applied by a direction under section 106 of the 2003 Act; and

“operator” means the operator of an electronic communications code network.

3. The exercise of the powers of article 30 (statutory undertakers) are subject to Part 10 of Schedule 3A to the Communications Act 2003(b).

4.—(1) Subject to sub-paragraphs (2) to (4), if as the result of the authorised development or their construction, or of any subsidence resulting from any of those works—

- (a) any damage is caused to any electronic communications apparatus belonging to an operator (other than apparatus the repair of which is not reasonably necessary in view of its intended removal for the purposes of those works, or other property of an operator); or
- (b) there is any interruption in the supply of the service provided by an operator, the undertaker must bear and pay the cost reasonably incurred by the operator in making good such damage or restoring the supply and must—
 - (i) make reasonable compensation to an operator for loss sustained by it; and

(a) See section 106.

(b) 2003 c.21.

- (ii) indemnify an operator against claims, demands, proceedings, costs, damages and expenses which may be made or taken against, or recovered from, or incurred by, an operator by reason, or in consequence of, any such damage or interruption.

(2) Nothing in sub-paragraph (1) imposes any liability on the undertaker with respect to any damage or interruption to the extent that it is attributable to the act, neglect or default of an operator, its officers, servants, contractors or agents.

(3) The operator must give the undertaker reasonable notice of any such claim or demand and no settlement or compromise of the claim or demand may be made without the consent of the undertaker which, if it withholds such consent, shall have the sole conduct of any settlement or compromise or of any proceedings necessary to resist the claim or demand.

(4) Any difference arising between the undertaker and the operator under this paragraph must be referred to and settled by arbitration under article 39 (arbitration).

5. This Part of this Schedule does not apply to—

- (a) any apparatus in respect of which the relations between the undertaker and an operator are regulated by the provisions of Part 3 of the 1991 Act; or
- (b) any damage, or any interruption, caused by electro-magnetic interference arising from the construction or use of the authorised development.

6. Nothing in this Part of this Schedule affects the provisions of any enactment or agreement regulating the relations between the undertaker and an operator in respect of any apparatus laid or erected in land belonging to the undertaker on the date on which this Order is made.

PART 3A

FOR THE PROTECTION OF NATIONAL GRID ELECTRICITY TRANSMISSION PLC AS ELECTRICITY UNDERTAKER

Application

1. For the protection of National Grid as referred to in this Part of this Schedule the following provisions must, unless otherwise agreed in writing between the undertaker and National Grid, have effect.

Interpretation

2. In this Part of this Schedule—

“alternative apparatus” means appropriate alternative apparatus to the satisfaction of National Grid to enable National Grid to fulfil its statutory functions in a manner no less efficient than previously;

“apparatus” means any electric lines or electrical plant as defined in the Electricity Act 1989, belonging to or maintained by National Grid together with any replacement apparatus and such other apparatus constructed pursuant to this Order that becomes operational apparatus of National Grid for the purposes of transmission, distribution and/or supply and includes any structure in which apparatus is or must be lodged or which gives or will give access to apparatus;

“authorised development” has the same meaning as in article 2 (interpretation) of this Order (unless otherwise specified) and for the purposes of this Part of this Schedule must include the use and maintenance of the authorised development and construction of any works authorised by this Schedule;

“functions” includes powers and duties;

“ground mitigation scheme” means a scheme approved by National Grid (such approval not to be unreasonably withheld or delayed) setting out the necessary measures (if any) for a ground subsidence event;

“ground monitoring scheme” means a scheme for monitoring ground subsidence which sets out the apparatus which is to be subject to such monitoring, the extent of land to be monitored, the manner in which ground levels are to be monitored, the timescales of any monitoring activities and the extent of ground subsidence which, if exceeded, shall require the undertaker to submit for National Grid’s approval a ground mitigation scheme;

“ground subsidence event” means any ground subsidence identified by the monitoring activities set out in the ground monitoring scheme that has exceeded the level described in the ground monitoring scheme as requiring a ground mitigation scheme;

“in” in a context referring to apparatus or alternative apparatus in land includes a reference to apparatus or alternative apparatus under, over, across, along or upon such land;

“maintain” and “maintenance” shall include the ability and right to do any of the following in relation to any apparatus or alternative apparatus of National Grid including construct, use, repair, alter, inspect, renew or remove the apparatus;

“National Grid” means National Grid Electricity Transmission PLC (Company No. 2366977) whose registered office is at 1-3 Strand, London, WC2N 5EH or any successor as a licence holder within the meaning of Part 1 of the Electricity Act 1989;

“plan” or “plans” include all designs, drawings, specifications, method statements, soil reports, programmes, calculations, risk assessments and other documents that are reasonably necessary properly and sufficiently to describe and assess the works to be executed; and

“specified works” means any of the authorised development or activities (including onshore site preparation works, monitoring, ground work operations or the receipt and erection of construction plant and equipment) undertaken in association with the authorised development which—

- (a) will or may be situated over, or within 15 metres measured in any direction of any apparatus the removal of which has not been required by the undertaker under paragraph 7 or otherwise;
- (b) may in any way adversely affect any apparatus the removal of which has not been required by the undertaker under paragraph 7 or otherwise; and/or
- (c) includes in relation to any electricity apparatus any activity that is referred to in development near overhead lines EN43-8 and HSE’s guidance note 6 “Avoidance of Danger from Overhead Lines.”

3. Except for paragraphs 4 (apparatus of National Grid in streets subject to temporary stopping up), 9 (retained apparatus: protection of National Grid as electricity undertaker), 10 (expenses) and 11 (indemnity) which must apply in respect of the exercise of all or any powers under this Order affecting the rights and apparatus of National Grid, this Schedule does not apply to apparatus in respect of which the relations between the undertaker and National Grid are regulated by the provisions of Part 3 of the 1991 Act.

Apparatus of National Grid in streets subject to temporary stopping up

4.—(1) Where any public right of way is stopped up under article 11 (stopping up and diversion of public rights of way and access land), if National Grid has any apparatus in the street or accessed via that street National Grid must be entitled to the same rights in respect of such apparatus as it enjoyed immediately before the stopping up and the undertaker must grant to National Grid, or must procure the granting to National Grid of, legal easements reasonably satisfactory to National Grid in respect of such apparatus and access to it prior to the stopping up of any such street or highway but nothing in this paragraph affects any right of the undertaker or National Grid to require the removal of that apparatus under paragraph 7 or the power of the undertaker, subject to compliance with this sub-paragraph, to carry out works under paragraph 9.

(2) Notwithstanding the temporary stopping up under the powers of article 11 (stopping up and diversion of public rights of way and access land), National Grid must be at liberty at all times to take all necessary access across any such street and/or to execute and do all such works and things

in, upon or under any such street as may be reasonably necessary or desirable to enable it to maintain any apparatus which at the time of the stopping up or diversion was in that street.

Protective works to buildings

5. The undertaker, in the case of the powers conferred by article 16 (protective work to buildings), must exercise those powers so as not to obstruct or render less convenient the access to any apparatus without the written consent of National Grid which must not unreasonably be withheld.

Acquisition of land

6.—(1) Regardless of any provision in this Order or anything shown on the land plans or contained in the book of reference to this Order, the undertaker must not appropriate or acquire or take temporary possession of any land or apparatus or appropriate, acquire, extinguish, interfere with or override any easement, other interest or right and/or apparatus of National Grid otherwise than by agreement (such agreement not to be unreasonably withheld).

(2) The undertaker and National Grid agree that where there is any inconsistency or duplication between the provisions set out in this Part of this Schedule relating to the relocation and/or removal of apparatus (including but not limited to the payment of costs and expenses relating to such relocation and/or removal of apparatus) and the provisions of any existing easement, rights, agreements and licences granted, used, enjoyed or exercised by National Grid and/or other enactments relied upon by National Grid as of right or other use in relation to the apparatus, then the provisions in this Schedule shall prevail.

(3) Any agreement or consent granted by National Grid under paragraph 9 or any other paragraph of this Part of this Schedule, shall not be taken to constitute agreement under sub-paragraph (1).

Removal of apparatus

7.—(1) If, in the exercise of the powers conferred by the Order, the undertaker acquires any interest in or possess temporarily any Order land in which any apparatus is placed, that apparatus must not be removed under this Part of this Schedule and any right of National Grid to maintain that apparatus in that land must not be extinguished until alternative apparatus has been constructed, and is in operation to the reasonable satisfaction of National Grid in accordance with sub-paragraphs (2) to (5) inclusive.

(2) If, for the purpose of executing any works comprised in the authorised development in, on, under or over any land purchased, held, appropriated or used under this Order, the undertaker requires the removal of any apparatus placed in that land, it must give to National Grid 56 days' advance written notice of that requirement, together with a plan of the work proposed, and of the proposed position of the alternative apparatus to be provided or constructed and in that case (or if in consequence of the exercise of any of the powers conferred by this Order National Grid reasonably needs to remove any of its apparatus) the undertaker must, subject to sub-paragraph (3), secure any necessary consents for the alternative apparatus and afford to National Grid to its satisfaction (taking into account paragraph 8(1) below) the necessary facilities and rights—

- (a) for the construction of alternative apparatus in other land of or land secured by the undertaker; and
- (b) subsequently for the maintenance of that apparatus.

(3) If alternative apparatus or any part of such apparatus is to be constructed elsewhere than in other land of or land secured by the undertaker, or the undertaker is unable to afford such facilities and rights as are mentioned in sub-paragraph (2), in the land in which the alternative apparatus or part of such apparatus is to be constructed, National Grid must, on receipt of a written notice to that effect from the undertaker, take such steps as are reasonable in the circumstances in an endeavour to obtain the necessary facilities and rights in the land in which the alternative

apparatus is to be constructed save that this obligation shall not extend to the requirement for National Grid to use its compulsory purchase powers to this end unless it elects to so do.

(4) Any alternative apparatus to be constructed in land of or land secured by the undertaker under this Part of this Schedule must be constructed in such manner and in such line or situation as may be agreed between National Grid and the undertaker.

(5) National Grid must, after the alternative apparatus to be provided or constructed has been agreed, and subject to a written diversion agreement having been entered into between the parties and the grant to National Grid of any such facilities and rights as are referred to in sub-paragraph (2) or (3), proceed without unnecessary delay to construct and bring into operation the alternative apparatus and subsequently to remove any apparatus required by the undertaker to be removed under the provisions of this Part of this Schedule.

Facilities and rights for alternative apparatus

8.—(1) Where, in accordance with the provisions of this Part of this Schedule, the undertaker affords to or secures for National Grid facilities and rights in land for the construction, use, maintenance and protection of alternative apparatus in substitution for apparatus to be removed, those facilities and rights must be granted upon such terms and conditions as may be agreed between the undertaker and National Grid and must be no less favourable on the whole to National Grid than the facilities and rights enjoyed by it in respect of the apparatus to be removed unless otherwise agreed by National Grid.

(2) If the facilities and rights to be afforded by the undertaker and agreed with National Grid under sub-paragraph (1) above in respect of any alternative apparatus, and the terms and conditions subject to which those facilities and rights are to be granted, are less favourable on the whole to National Grid than the facilities and rights enjoyed by it in respect of the apparatus to be removed and the terms and conditions to which those facilities and rights are subject the matter must be referred to arbitration under paragraph 15 (arbitration) and the arbitrator must make such provision for the payment of compensation by the undertaker to National Grid as appears to the arbitrator to be reasonable having regard to all the circumstances of the particular case. In respect of the appointment of an arbitrator under this sub-paragraph (2) article 39 (arbitration) of this Order must apply.

Retained apparatus: Protection of National Grid as Electricity Undertaker

9.—(1) Not less than 56 days before the commencement of any specified works, the undertaker must submit to National Grid a plan of the works to be executed and seek from National Grid details of the underground extent of their electricity assets.

(2) In relation to works which will or may be situated on, over, under or within—

(a) 15 metres measured in any direction of any apparatus, or

(b) involve embankment works within 15 metres of any apparatus,

the plan to be submitted to National Grid under sub-paragraph (1) must include a method statement and describe—

(a) the exact position of the works;

(b) the level at which these are proposed to be constructed or renewed;

(c) the manner of their construction or renewal including details of excavation, positioning of plant;

(d) the position of all apparatus;

(e) by way of detailed drawings, every alteration proposed to be made to or close to any such apparatus;

(f) any intended maintenance regimes;

(g) an assessment of risks of rise of earth issues; and

(h) a ground monitoring scheme, where required.

(3) In relation to any works which will or may be situated on, over, under or within 10 metres of any part of the foundations of an electricity tower or between any two or more electricity towers, the plan to be submitted under sub-paragraph (1) must in addition to the matters set out in sub-paragraph (2) include a method statement describing—

- (a) details of any cable trench design including route, dimensions, clearance to pylon foundations;
- (b) demonstration that pylon foundations will not be affected prior to, during and post construction;
- (c) details of load bearing capacities of trenches;
- (d) details of cable installation methodology including access arrangements, jointing bays and backfill methodology;
- (e) a written management plan for high voltage hazard during construction and ongoing maintenance of the cable route;
- (f) written details of the operations and maintenance regime for the cable, including frequency and method of access;
- (g) assessment of earth rise potential if reasonably required by National Grid's engineers; and
- (h) evidence that trench bearing capacity is to be designed to support overhead line construction traffic of up to and including 26 tonnes in weight.

(4) The undertaker must not commence any works to which sub-paragraph (1), (2) or (3) apply until National Grid has given written approval of the plan so submitted.

(5) Any approval of National Grid required under sub-paragraph (1), (2), or (3)—

- (a) may be given subject to reasonable conditions for any purpose mentioned in sub-paragraph (6) or (8); and
- (b) must not be unreasonably withheld.

(6) In relation to a work to which sub-paragraph (1), (2) or (3) apply, National Grid may require such modifications to be made to the plans as may be reasonably necessary for the purpose of securing its apparatus against interference or risk of damage or for the provision of protective works or for the purpose of providing or securing proper and convenient means of access to any apparatus.

(7) Works to which this paragraph applies must only be executed in accordance with the plan, submitted under sub-paragraph (1) or as relevant sub-paragraph (2), (3) or (6) as approved or as amended from time to time by agreement between the undertaker and National Grid and in accordance with such reasonable requirements as may be made in accordance with sub-paragraphs (5), (6), (8) and/or (9) by National Grid for the alteration or otherwise for the protection of the apparatus, or for securing access to it, and National Grid will be entitled to watch and inspect the execution of those works.

(8) Where National Grid requires any protective works to be carried out by itself or by the undertaker (whether of a temporary or permanent nature) such protective works, inclusive of any measures or schemes required and approved as part of the plan approved pursuant to this paragraph, must be carried out to National Grid's satisfaction prior to the commencement of any specified works for which protective works are required and National Grid must give notice of its requirement for such works within 42 days of the date of submission of a plan pursuant to this paragraph (except in an emergency).

(9) If National Grid in accordance with sub-paragraphs (6) or (8) and in consequence of the works proposed by the undertaker, reasonably requires the removal of any apparatus and gives written notice to the undertaker of that requirement, paragraphs (1) to (3) and (6) to (7) shall apply as if the removal of the apparatus had been required by the undertaker under paragraph 7(2).

(10) Nothing in this paragraph shall preclude the undertaker from submitting at any time or from time to time, but in no case less than 56 days before commencing the execution of any specified works, a new plan, instead of the plan previously submitted, and having done so the provisions of this paragraph shall apply to and in respect of the new plan.

(11) The undertaker will not be required to comply with sub-paragraph (1) where it needs to carry out emergency works as defined in the 1991 Act but in that case it must give to National Grid notice as soon as is reasonably practicable and a plan of those works and must—

- (a) comply with sub-paragraphs (6), (7) and (8) insofar as is reasonably practicable in the circumstances; and comply with sub-paragraph (12) at all times.

(12) At all times when carrying out any works authorised under this Order, the undertaker must comply with National Grid's policies for development near overhead lines ENA TA 43-8 and the Health and Safety Executive's guidance note 6 "Avoidance of Danger from Overhead Lines".

Expenses

10.—(1) Save where otherwise agreed in writing between National Grid and the undertaker and subject to the following provisions of this paragraph, the undertaker must pay to National Grid within 30 days of receipt of an itemised invoice or claim from National Grid all charges, costs and expenses reasonably anticipated within the following three months or incurred by National Grid in, or in connection with, the inspection, removal, relaying or replacing, alteration or protection of any apparatus or the construction of any new apparatus or alternative apparatus which may be required in consequence of the execution of any such works as are referred to in this Part of this Schedule including without limitation—

- (a) any costs reasonably incurred by or compensation properly paid by National Grid in connection with the acquisition of rights or the exercise of statutory powers for such apparatus including without limitation all costs incurred by National Grid as a consequence of National Grid—
 - (i) using its own compulsory purchase powers to acquire any necessary rights under paragraph 7(3); or
 - (ii) exercising any compulsory purchase powers in the Order transferred to or benefitting National Grid;
- (b) in connection with the cost of the carrying out of any diversion work or the provision of any alternative apparatus, where no written diversion agreement is otherwise in place;
- (c) the cutting off of any apparatus from any other apparatus or the making safe of redundant apparatus;
- (d) the approval of plans;
- (e) the carrying out of protective works, plus a capitalised sum to cover the cost of maintaining and renewing permanent protective works;
- (f) the survey of any land, apparatus or works, the inspection and monitoring of works or the installation or removal of any temporary works reasonably necessary in consequence of the execution of any such works referred to in this Part of this Schedule.

(2) There will be deducted from any sum payable under sub-paragraph (1) the value of any apparatus removed under the provisions of this Part of this Schedule and which is not re-used as part of the alternative apparatus, that value being calculated after removal.

(3) If in accordance with the provisions of this Part of this Schedule—

- (a) apparatus of better type, of greater capacity or of greater dimensions is placed in substitution for existing apparatus of worse type, of smaller capacity or of smaller dimensions; or
- (b) apparatus (whether existing apparatus or apparatus substituted for existing apparatus) is placed at a depth greater than the depth at which the existing apparatus was situated,

and the placing of apparatus of that type or capacity or of those dimensions or the placing of apparatus at that depth, as the case may be, is not agreed by the undertaker or, in default of agreement settled by arbitration in accordance with article 39 (arbitration) of this Order to be necessary, then, if such placing involves cost in the construction of works under this Part of this Schedule exceeding that which would have been involved if the apparatus placed had been of the existing type, capacity or dimensions, or at the existing depth, as the case may be,

the amount which apart from this sub-paragraph would be payable to National Grid by virtue of sub-paragraph (1) will be reduced by the amount of that excess save to the extent that it is not possible in the circumstances to obtain the existing type of apparatus at the same capacity and dimensions or place at the existing depth in which case full costs will be borne by the undertaker.

(4) For the purposes of sub-paragraph (3)—

- (a) an extension of apparatus to a length greater than the length of existing apparatus will not be treated as a placing of apparatus of greater dimensions than those of the existing apparatus; and
- (b) where the provision of a joint in a pipe or cable is agreed, or is determined to be necessary, the consequential provision of a jointing chamber or of a manhole will be treated as if it also had been agreed or had been so determined.

(5) Any amount which apart from this sub-paragraph would be payable to National Grid in respect of works by virtue of sub-paragraph (1) will, if the works include the placing of apparatus provided in substitution for apparatus placed more than 7 years and 6 months earlier so as to confer on National Grid any financial benefit by deferment of the time for renewal of the apparatus in the ordinary course, be reduced by the amount which represents that benefit.

Indemnity

11.—(1) Subject to sub-paragraphs (2) and (3), if by reason or in consequence of the construction of any works authorised by this Part of this Schedule or in consequence of the construction, use, maintenance or failure of any of the authorised development by or on behalf of the undertaker or in consequence of any act or default of the undertaker (or any person employed or authorised by him) in the course of carrying out such works (including without limitation works carried out by the undertaker under this Part of this Schedule or any subsidence resulting from any of these works), any damage is caused to any apparatus or alternative apparatus (other than apparatus the repair of which is not reasonably necessary in view of its intended removal for the purposes of the authorised development) or property of National Grid, or there is any interruption in any service provided, or in the supply of any goods, by National Grid, or National Grid becomes liable to pay any amount to any third party, the undertaker will—

- (a) bear and pay on demand accompanied by an invoice or claim from National Grid the cost reasonably and properly incurred by National Grid in making good such damage or restoring the supply; and
- (b) indemnify National Grid for any other expenses, loss, demands, proceedings, damages, claims, penalty or costs incurred by or recovered from National Grid, by reason or in consequence of any such damage or interruption or National Grid becoming liable to any third party other than arising from any default by National Grid.

(2) The fact that any act or thing may have been done by National Grid on behalf of the undertaker or in accordance with a plan approved by National Grid or in accordance with any requirement of National Grid as a consequence of the authorised development or under its supervision will not (unless sub-paragraph (3) applies), excuse the undertaker from liability under the provisions of this sub-paragraph (2) where the undertaker fails to carry out and execute the works properly with due care and attention and in a skilful and workman like manner or in a manner that does not accord with the approved plan or as otherwise agreed between the undertaker and National Grid.

(3) Nothing in sub-paragraph (1) shall impose any liability on the undertaker in respect of—

- (a) any damage or interruption to the extent that it is attributable to the neglect or default of National Grid, its officers, servants, contractors or agents;
- (b) any authorised development and/or any other works authorised by this Part of this Schedule carried out by National Grid as an assignee, transferee or lessee of the undertaker with the benefit of the Order pursuant to section 156 of the 2008 Act or article 5 (benefit of the Order) of the Order subject to the proviso that once such works become apparatus (“new apparatus”), any works yet to be executed and not falling within this sub-

paragraph 11(3)(b) will be subject to the full terms of this Part of this Schedule including this paragraph 11 in respect of such new apparatus; and/or

- (c) any indirect or consequential loss of any third party (including but not limited to loss of use, revenue, profit, contract, production, increased cost of working or business interruption) arising from any such damage or interruption, which is not reasonably foreseeable.

(4) National Grid must give the undertaker reasonable notice of any such claim or demand and no settlement, admission of liability or compromise or demand must be made, unless payment is required in connection with a statutory compensation scheme without first consulting the undertaker and considering its representations.

Enactments and agreements

12. Save to the extent provided for to the contrary elsewhere in this Part of this Schedule or by agreement in writing between the undertaker and National Grid, nothing in this Part of this Schedule affects the provisions of any enactment or agreement regulating the relations between the undertaker and National Grid in respect of any apparatus laid or erected in land belonging to the undertaker on the date on which this Order is made.

Co-operation

13.—(1) Where in consequence of the proposed construction of any part of the authorised development, the undertaker or National Grid requires the removal of apparatus under paragraph 7(2) or National Grid makes requirements for the protection or alteration of apparatus under paragraph 9, National Grid shall use its best endeavours to co-ordinate the execution of the works in the interests of safety and the efficient and economic execution of the authorised development and taking into account the need to ensure the safe and efficient operation of National Grid's undertaking and National Grid shall use its best endeavours to co-operate with the undertaker for that purpose.

(2) For the avoidance of doubt whenever National Grid's consent, agreement or approval to is required in relation to plans, documents or other information submitted by the undertaker or the taking of action by National Grid, it must not be unreasonably withheld or delayed.

Access

14. If in consequence of the agreement reached in accordance with paragraph 6 or the powers granted under this Order the access to any apparatus is materially obstructed, the undertaker must provide such alternative means of access to such apparatus as will enable National Grid to maintain or use the apparatus no less effectively than was possible before such obstruction.

Arbitration

15. Save for differences or disputes arising under paragraphs 7(2), 7(4), 8(1) and 9 any difference or dispute arising between the undertaker and National Grid under this Part of this Schedule must, unless otherwise agreed in writing between the undertaker and National Grid, be determined by arbitration in accordance with article 39 (arbitration).

Notices

16. The plans submitted to National Grid by the undertaker pursuant to paragraph 9(1) must be sent to National Grid LSBUD at <https://lsbud.co.uk/> or assetprotection@nationalgrid.com or such other address as National Grid may from time to time appoint instead for that purpose and notify to the undertaker in writing.

PART 3B

FOR THE PROTECTION OF NATIONAL GRID GAS PLC AS GAS UNDERTAKER

Application

1. For the protection of National Grid as referred to in this Part of this Schedule the following provisions must, unless otherwise agreed in writing between the undertaker and National Grid, have effect.

Interpretation

2. In this Part of this Schedule—

“alternative apparatus” means appropriate alternative apparatus to the satisfaction of National Grid to enable National Grid to fulfil its statutory functions in a manner no less efficient than previously;

“apparatus” means any mains, pipes or other apparatus belonging to or maintained by National Grid for the purposes of gas supply, together with any replacement apparatus and such other apparatus constructed pursuant to this Order that becomes operational apparatus of National Grid for the purposes of transmission, distribution and/or supply and includes any structure in which apparatus is or must be lodged or which gives or will give access to apparatus;

“authorised development” has the same meaning as in article 2 (interpretation) of this Order (unless otherwise specified) and for the purposes of this Part of this Schedule must include the use and maintenance of the authorised development and construction of any works authorised by this Schedule;

“functions” includes powers and duties;

“ground mitigation scheme” means a scheme approved by National Grid (such approval not to be unreasonably withheld or delayed) setting out the necessary measures (if any) for a ground subsidence event;

“ground monitoring scheme” means a scheme for monitoring ground subsidence which sets out the apparatus which is to be subject to such monitoring, the extent of land to be monitored, the manner in which ground levels are to be monitored, the timescales of any monitoring activities and the extent of ground subsidence which, if exceeded, shall require the undertaker to submit for National Grid’s approval a ground mitigation scheme;

“ground subsidence event” means any ground subsidence identified by the monitoring activities set out in the ground monitoring scheme that has exceeded the level described in the ground monitoring scheme as requiring a ground mitigation scheme;

“in” in a context referring to apparatus or alternative apparatus in land includes a reference to apparatus or alternative apparatus under, over, across, along or upon such land;

“maintain” and “maintenance” shall include the ability and right to do any of the following in relation to any apparatus or alternative apparatus of National Grid including construct, use, repair, alter, inspect, renew or remove the apparatus;

“National Grid” means National Grid Gas PLC (Company No. 200600) whose registered office is at 1-3 Strand, London, WC2N 5EH, or any successor as a gas transporter within the meaning of Part 1 of the Gas Act 1986;

“Network Code” means the network code prepared by National Grid as from time to time modified pursuant to the licence granted, or treated as granted, to it from time to time under the Gas Act 1986 as amended, in respect of its national transmission system;

“Network Code Claims” means any claim made against National Grid by any person under the Network Code arising out of or in connection with any failure by National Grid to make gas available for off take at, or a failure to accept gas tendered for delivery from, any entry point to or exit point from the National Grid network as a result of the authorised works or any costs and/or expenses incurred by National Grid as a result of or in connection with, it taking action (including purchase or buy back of capacity) for the purpose of managing constraint or

potential constraint on the National Grid Network which may arise as a direct result of the authorised works;

“plan” or “plans” include all designs, drawings, specifications, method statements, soil reports, programmes, calculations, risk assessments and other documents that are reasonably necessary properly and sufficiently to describe and assess the works to be executed; and

“specified works” means any of the authorised development or activities (including onshore site preparation works, monitoring, ground work operations or the receipt and erection of construction plant and equipment) undertaken in association with the authorised development which—

- (a) will or may be situated over, or within 15 metres measured in any direction of any apparatus the removal of which has not been required by the undertaker under paragraph 7 or otherwise;
- (b) may in any way adversely affect any apparatus the removal of which has not been required by the undertaker under paragraph 7 or otherwise; and/or
- (c) includes in relation to any gas apparatus any of the activities that are referred to in paragraph 8 of T/SP/SSW/22 (National Grid’s policies for safe working in proximity to gas apparatus “Specification for safe working in the vicinity of National Grid, High pressure Gas pipelines and associated installation requirements for third parties T/SP/SSW/22”).

3. Except for paragraphs 4 (apparatus of National Grid in streets subject to temporary stopping up), 9 (retained apparatus: protection of National Grid as gas undertaker), 10 (expenses) and 11 (indemnity) which must apply in respect of the exercise of all or any powers under this Order affecting the rights and apparatus of National Grid, this Schedule does not apply to apparatus in respect of which the relations between the undertaker and National Grid are regulated by the provisions of Part 3 of the 1991 Act.

Apparatus of National Grid in streets subject to temporary stopping up

4.—(1) Where any public right of way is stopped up under article 11 (stopping up and diversion of public rights of way and access land), if National Grid has any apparatus in the street or accessed via that street National Grid must be entitled to the same rights in respect of such apparatus as it enjoyed immediately before the stopping up and the undertaker must grant to National Grid, or must procure the granting to National Grid of, legal easements reasonably satisfactory to National Grid in respect of such apparatus and access to it prior to the stopping up of any such street or highway but nothing in this paragraph affects any right of the undertaker or National Grid to require the removal of that apparatus under paragraph 7 or the power of the undertaker, subject to compliance with this sub-paragraph, to carry out works under paragraph 9.

(2) Notwithstanding the temporary stopping up under the powers of article 11 (stopping up and diversion of public rights of way and access land), National Grid must be at liberty at all times to take all necessary access across any such street and/or to execute and do all such works and things in, upon or under any such street as may be reasonably necessary or desirable to enable it to maintain any apparatus which at the time of the stopping up or diversion was in that street.

Protective works to buildings

5. The undertaker, in the case of the powers conferred by article 16 (protective work to buildings), must exercise those powers so as not to obstruct or render less convenient the access to any apparatus without the written consent of National Grid which must not unreasonably be withheld.

Acquisition of land

6.—(1) Regardless of any provision in this Order or anything shown on the land plans or contained in the book of reference to this Order, the undertaker must not appropriate or acquire or take temporary possession of any land or apparatus or appropriate, acquire, extinguish, interfere

with or override any easement, other interest or right and/or apparatus of National Grid otherwise than by agreement (such agreement not to be unreasonably withheld).

(2) The undertaker and National Grid agree that where there is any inconsistency or duplication between the provisions set out in this Part of this Schedule relating to the relocation and/or removal of apparatus (including but not limited to the payment of costs and expenses relating to such relocation and/or removal of apparatus) and the provisions of any existing easement, rights, agreements and licences granted, used, enjoyed or exercised by National Grid and/or other enactments relied upon by National Grid as of right or other use in relation to the apparatus, then the provisions in this Schedule shall prevail.

(3) Any agreement or consent granted by National Grid under paragraph 9 or any other paragraph of this Part of this Schedule, shall not be taken to constitute agreement under sub-paragraph (1).

Removal of apparatus

7.—(1) If, in the exercise of the powers conferred by the Order, the undertaker acquires any interest in or possess temporarily any Order land in which any apparatus is placed, that apparatus must not be removed under this Part of this Schedule and any right of National Grid to maintain that apparatus in that land must not be extinguished until alternative apparatus has been constructed, and is in operation to the reasonable satisfaction of National Grid in accordance with sub-paragraphs (2) to (5) inclusive.

(2) If, for the purpose of executing any works comprised in the authorised development in, on, under or over any land purchased, held, appropriated or used under this Order, the undertaker requires the removal of any apparatus placed in that land, it must give to National Grid 56 days' advance written notice of that requirement, together with a plan of the work proposed, and of the proposed position of the alternative apparatus to be provided or constructed and in that case (or if in consequence of the exercise of any of the powers conferred by this Order National Grid reasonably needs to remove any of its apparatus) the undertaker must, subject to sub-paragraph (3), secure any necessary consents for the alternative apparatus and afford to National Grid to its satisfaction (taking into account paragraph 8(1) below) the necessary facilities and rights—

- (a) for the construction of alternative apparatus in other land of or land secured by the undertaker; and
- (b) subsequently for the maintenance of that apparatus.

(3) If alternative apparatus or any part of such apparatus is to be constructed elsewhere than in other land of or land secured by the undertaker, or the undertaker is unable to afford such facilities and rights as are mentioned in sub-paragraph (2), in the land in which the alternative apparatus or part of such apparatus is to be constructed, National Grid must, on receipt of a written notice to that effect from the undertaker, take such steps as are reasonable in the circumstances in an endeavour to obtain the necessary facilities and rights in the land in which the alternative apparatus is to be constructed save that this obligation shall not extend to the requirement for National Grid to use its compulsory purchase powers to this end unless it elects to so do.

(4) Any alternative apparatus to be constructed in land of or land secured by the undertaker under this Part of this Schedule must be constructed in such manner and in such line or situation as may be agreed between National Grid and the undertaker.

(5) National Grid must, after the alternative apparatus to be provided or constructed has been agreed, and subject to a written diversion agreement having been entered into between the parties and the grant to National Grid of any such facilities and rights as are referred to in sub-paragraph (2) or (3), proceed without unnecessary delay to construct and bring into operation the alternative apparatus and subsequently to remove any apparatus required by the undertaker to be removed under the provisions of this Part of this Schedule.

Facilities and rights for alternative apparatus

8.—(1) Where, in accordance with the provisions of this Part of this Schedule, the undertaker affords to or secures for National Grid facilities and rights in land for the construction, use,

maintenance and protection of alternative apparatus in substitution for apparatus to be removed, those facilities and rights must be granted upon such terms and conditions as may be agreed between the undertaker and National Grid and must be no less favourable on the whole to National Grid than the facilities and rights enjoyed by it in respect of the apparatus to be removed unless otherwise agreed by National Grid.

(2) If the facilities and rights to be afforded by the undertaker and agreed with National Grid under sub-paragraph (1) above in respect of any alternative apparatus, and the terms and conditions subject to which those facilities and rights are to be granted, are less favourable on the whole to National Grid than the facilities and rights enjoyed by it in respect of the apparatus to be removed and the terms and conditions to which those facilities and rights are subject the matter must be referred to arbitration under paragraph 16 (arbitration) and the arbitrator must make such provision for the payment of compensation by the undertaker to National Grid as appears to the arbitrator to be reasonable having regard to all the circumstances of the particular case. In respect of the appointment of an arbitrator under this sub-paragraph (2) article 39 (arbitration) of this Order must apply.

Retained apparatus: protection of National Grid as Gas Undertaker

9.—(1) Not less than 56 days before the commencement of any specified works the undertaker must submit to National Grid a plan and, if reasonably required by National Grid, a ground monitoring scheme in respect of those works.

(2) The plan to be submitted to National Grid under sub-paragraph (1) must include a method statement and describe—

- (a) the exact position of the works;
- (b) the level at which these are proposed to be constructed or renewed;
- (c) the manner of their construction or renewal including details of excavation, positioning of plant etc;
- (d) the position of all apparatus;
- (e) by way of detailed drawings, every alteration proposed to be made to or close to any such apparatus; and
- (f) any intended maintenance regimes.

(3) The undertaker must not commence any works to which sub-paragraphs (1) and (2) apply until National Grid has given written approval of the plan so submitted.

(4) Any approval of National Grid required under sub-paragraph (3)—

- (a) may be given subject to reasonable conditions for any purpose mentioned in sub-paragraph (5) or (7); and
- (b) must not be unreasonably withheld.

(5) In relation to a work to which sub-paragraphs (1) and/or (2) apply, National Grid may require such modifications to be made to the plans as may be reasonably necessary for the purpose of securing its apparatus against interference or risk of damage or for the provision of protective works or for the purpose of providing or securing proper and convenient means of access to any apparatus.

(6) Works to which this paragraph applies must only be executed in accordance with the plan, submitted under sub-paragraphs (1) and (2) or as relevant sub-paragraph (5), as amended from time to time by agreement between the undertaker and National Grid and in accordance with such reasonable requirements as may be made in accordance with sub-paragraphs (5), (7) and/or (8) by National Grid for the alteration or otherwise for the protection of the apparatus, or for securing access to it, and National Grid will be entitled to watch and inspect the execution of those works.

(7) Where National Grid requires any protective works to be carried out by itself or by the undertaker (whether of a temporary or permanent nature) such protective works, inclusive of any measures or schemes required and approved as part of the plan approved pursuant to this paragraph, must be carried out to National Grid's satisfaction prior to the commencement of any

specified works for which protective works are required and National Grid must give notice of its requirement for such protective works within 42 days of the date of submission of a plan pursuant to this paragraph (except in an emergency).

(8) If National Grid in accordance with sub-paragraph (5) or (7) and in consequence of the works proposed by the undertaker, reasonably requires the removal of any apparatus and gives written notice to the undertaker of that requirement, paragraphs (1) to (3) and (6) to (7) apply as if the removal of the apparatus had been required by the undertaker under paragraph 7(2).

(9) Nothing in this paragraph shall preclude the undertaker from submitting at any time or from time to time, but in no case less than 56 days before commencing the execution of any specified works, a new plan, instead of the plan previously submitted, and having done so the provisions of this paragraph will apply to and in respect of the new plan.

(10) The undertaker will not be required to comply with sub-paragraph (1) where it needs to carry out emergency works as defined in the 1991 Act but in that case it must give to National Grid notice as soon as is reasonably practicable and a plan of those works and must—

- (a) comply with sub-paragraphs (5), (6) and (7) insofar as is reasonably practicable in the circumstances; and comply with sub-paragraph (11) at all times.

(11) At all times when carrying out any works authorised under this Order the undertaker must comply with National Grid's policies for safe working in proximity to gas apparatus "Specification for safe working in the vicinity of National Grid, High pressure Gas pipelines and associated installation requirements for third parties T/SP/SSW22" and the Health and Safety Executive's HS(~G)47 Avoiding Danger from underground services".

(12) As soon as reasonably practicable after any ground subsidence event attributable to the authorised development the undertaker shall implement an appropriate ground mitigation scheme save that National Grid retains the right to carry out any further necessary protective works for the safeguarding of its apparatus and can recover any such costs in line with paragraph 10.

Expenses

10.—(1) Save where otherwise agreed in writing between National Grid and the undertaker and subject to the following provisions of this paragraph, the undertaker must pay to National Grid within 30 days of receipt of an itemised invoice or claim from National Grid all charges, costs and expenses reasonably anticipated within the following three months or incurred by National Grid in, or in connection with, the inspection, removal, relaying or replacing, alteration or protection of any apparatus or the construction of any new apparatus or alternative apparatus which may be required in consequence of the execution of any such works as are referred to in this Part of this Schedule including without limitation—

- (a) any costs reasonably incurred by or compensation properly paid by National Grid in connection with the acquisition of rights or the exercise of statutory powers for such apparatus including without limitation all costs incurred by National Grid as a consequence of National Grid—
 - (i) using its own compulsory purchase powers to acquire any necessary rights under paragraph 7(3); or
 - (ii) exercising any compulsory purchase powers in the Order transferred to or benefitting National Grid;
- (b) in connection with the cost of the carrying out of any diversion work or the provision of any alternative apparatus, where no written diversion agreement is otherwise in place;
- (c) the cutting off of any apparatus from any other apparatus or the making safe of redundant apparatus;
- (d) the approval of plans;
- (e) the carrying out of protective works, plus a capitalised sum to cover the cost of maintaining and renewing permanent protective works;

- (f) the survey of any land, apparatus or works, the inspection and monitoring of works or the installation or removal of any temporary works reasonably necessary in consequence of the execution of any such works referred to in this Part of this Schedule.

(2) There will be deducted from any sum payable under sub-paragraph (1) the value of any apparatus removed under the provisions of this Part of this Schedule and which is not re-used as part of the alternative apparatus, that value being calculated after removal.

(3) If in accordance with the provisions of this Part of this Schedule—

- (a) apparatus of better type, of greater capacity or of greater dimensions is placed in substitution for existing apparatus of worse type, of smaller capacity or of smaller dimensions; or
- (b) apparatus (whether existing apparatus or apparatus substituted for existing apparatus) is placed at a depth greater than the depth at which the existing apparatus was situated,

and the placing of apparatus of that type or capacity or of those dimensions or the placing of apparatus at that depth, as the case may be, is not agreed by the undertaker or, in default of agreement settled by arbitration in accordance with article 39 (arbitration) of this Order to be necessary, then, if such placing involves cost in the construction of works under this Part of this Schedule exceeding that which would have been involved if the apparatus placed had been of the existing type, capacity or dimensions, or at the existing depth, as the case may be, the amount which apart from this sub-paragraph would be payable to National Grid by virtue of sub-paragraph (1) will be reduced by the amount of that excess save to the extent that it is not possible in the circumstances to obtain the existing type of apparatus at the same capacity and dimensions or place at the existing depth in which case full costs will be borne by the undertaker.

(4) For the purposes of sub-paragraph (3)—

- (a) an extension of apparatus to a length greater than the length of existing apparatus will not be treated as a placing of apparatus of greater dimensions than those of the existing apparatus; and
- (b) where the provision of a joint in a pipe or cable is agreed, or is determined to be necessary, the consequential provision of a jointing chamber or of a manhole will be treated as if it also had been agreed or had been so determined.

(5) Any amount which apart from this sub-paragraph would be payable to National Grid in respect of works by virtue of sub-paragraph (1) will, if the works include the placing of apparatus provided in substitution for apparatus placed more than 7 years and 6 months earlier so as to confer on National Grid any financial benefit by deferment of the time for renewal of the apparatus in the ordinary course, be reduced by the amount which represents that benefit.

Indemnity

11.—(1) Subject to sub-paragraphs (2) and (3), if by reason or in consequence of the construction of any works authorised by this Part of this Schedule or in consequence of the construction, use, maintenance or failure of any of the authorised development by or on behalf of the undertaker or in consequence of any act or default of the undertaker (or any person employed or authorised by him) in the course of carrying out such works (including without limitation works carried out by the undertaker under this Part of this Schedule or any subsidence resulting from any of these works), any damage is caused to any apparatus or alternative apparatus (other than apparatus the repair of which is not reasonably necessary in view of its intended removal for the purposes of the authorised development) or property of National Grid, or there is any interruption in any service provided, or in the supply of any goods, by National Grid, or National Grid becomes liable to pay any amount to any third party, the undertaker will—

- (a) bear and pay on demand accompanied by an invoice or claim from National Grid the cost reasonably and properly incurred by National Grid in making good such damage or restoring the supply; and
- (b) indemnify National Grid for any other expenses, loss, demands, proceedings, damages, claims, penalty or costs incurred by or recovered from National Grid, by reason or in

consequence of any such damage or interruption or National Grid becoming liable to any third party and including any Network Code Claims other than arising from any default by National Grid.

(2) The fact that any act or thing may have been done by National Grid on behalf of the undertaker or in accordance with a plan approved by National Grid or in accordance with any requirement of National Grid as a consequence of the authorised development or under its supervision will not (unless sub-paragraph (3) applies), excuse the undertaker from liability under the provisions of this sub-paragraph (2) where the undertaker fails to carry out and execute the works properly with due care and attention and in a skilful and workman like manner or in a manner that does not accord with the approved plan or as otherwise agreed between the undertaker and National Grid.

(3) Nothing in sub-paragraph (1) shall impose any liability on the undertaker in respect of—

- (a) any damage or interruption to the extent that it is attributable to the neglect or default of National Grid, its officers, servants, contractors or agents;
- (b) any authorised development and/or any other works authorised by this Part of this Schedule carried out by National Grid as an assignee, transferee or lessee of the undertaker with the benefit of the Order pursuant to section 156 of the 2008 Act or article 5 (benefit of the Order) of the Order subject to the proviso that once such works become apparatus (“new apparatus”), any works yet to be executed and not falling within this sub-paragraph 11(3)(b) will be subject to the full terms of this Part of this Schedule including this paragraph 11 in respect of such new apparatus; and/or
- (c) any indirect or consequential loss of any third party (including but not limited to loss of use, revenue, profit, contract, production, increased cost of working or business interruption) arising from any such damage or interruption, which is not reasonably foreseeable.

(4) National Grid must give the undertaker reasonable notice of any such claim or demand and no settlement, admission of liability or compromise or demand must be made, unless payment is required in connection with a statutory compensation scheme without first consulting the undertaker and considering its representations.

Enactments and agreements

12. Save to the extent provided for to the contrary elsewhere in this Part of this Schedule or by agreement in writing between the undertaker and National Grid, nothing in this Part of this Schedule affects the provisions of any enactment or agreement regulating the relations between the undertaker and National Grid in respect of any apparatus laid or erected in land belonging to the undertaker on the date on which this Order is made.

Co-operation

13.—(1) Where in consequence of the proposed construction of any part of the authorised development, the undertaker or National Grid requires the removal of apparatus under paragraph 7(2) or National Grid makes requirements for the protection or alteration of apparatus under paragraph 9, National Grid shall use its best endeavours to co-ordinate the execution of the works in the interests of safety and the efficient and economic execution of the authorised development and taking into account the need to ensure the safe and efficient operation of National Grid’s undertaking and National Grid shall use its best endeavours to co-operate with the undertaker for that purpose.

(2) For the avoidance of doubt whenever National Grid’s consent, agreement or approval to is required in relation to plans, documents or other information submitted by the undertaker or the taking of action by National Grid, it must not be unreasonably withheld or delayed.

Access

14. If in consequence of the agreement reached in accordance with paragraph 6 or the powers granted under this Order the access to any apparatus is materially obstructed, the undertaker must provide such alternative means of access to such apparatus as will enable National Grid to maintain or use the apparatus no less effectively than was possible before such obstruction.

Arbitration

15. Save for differences or disputes arising under paragraphs 7(2), 7(4), 8(1) and 9 any difference or dispute arising between the undertaker and National Grid under this Part of this Schedule must, unless otherwise agreed in writing between the undertaker and National Grid, be determined by arbitration in accordance with article 39 (arbitration).

Notices

16. The plans submitted to National Grid by the undertaker pursuant to paragraph 9(1) must be sent to National Grid LSBUD at <https://lsbud.co.uk/> or assetprotection@nationalgrid.com or such other address as National Grid may from time to time appoint instead for that purpose and notify to the undertaker in writing.

PART 4

PROTECTION OF RAILWAY INTERESTS

1. The provisions of this Part of this Schedule have effect, unless otherwise agreed in writing between the undertaker and Network Rail and, in the case of paragraph 15 of this Part of this Schedule any other person on whom rights or obligations are conferred by that paragraph.

2. In this Part of this Schedule—

“asset protection agreement” means an agreement to regulate the construction and maintenance of the specified work in a form prescribed from time to time by Network Rail;

“construction” includes execution, placing, alteration and reconstruction and “construct” and “constructed” have corresponding meanings;

“the engineer” means an engineer appointed by Network Rail for the purposes of this Order;

“network licence” means the network licence, as the same is amended from time to time, granted to Network Rail Infrastructure Limited by the Secretary of State in exercise of their powers under section 8 (licences) of the Railways Act 1993(a);

“Network Rail” means Network Rail Infrastructure Limited (company number 02904587, whose registered office is at 1 Eversholt Street, London, NW1 2DN) and any associated company of Network Rail Infrastructure Limited which holds property for railway purposes, and for the purpose of this definition “associated company” means any company which is (within the meaning of section 1159 of the Companies Act 2006(b) the holding company of Network Rail Infrastructure Limited, a subsidiary of Network Rail Infrastructure Limited or another subsidiary of the holding company of Network Rail Infrastructure Limited and any successor to Network Rail Infrastructure Limited’s railway undertaking;

“plans” includes sections, designs, design data, software, drawings, specifications, soil reports, calculations, descriptions (including descriptions of methods of construction), staging proposals, programmes and details of the extent, timing and duration of any proposed occupation of railway property;

(a) 1993 c.43.

(b) 2006 c.46.

“railway operational procedures” means procedures specified under any access agreement (as defined in the Railways Act 1993) or station lease;

“railway property” means any railway belonging to Network Rail and—

- (a) any station, land, works, apparatus and equipment belonging to Network Rail or connected with any such railway; and
- (b) any easement or other property interest held or used by Network Rail or a tenant or licensee of Network Rail for the purposes of such railway or works, apparatus or equipment;

“regulatory consents” means any consent or approval required under—

- (a) the Railways Act 1993;
- (b) the network licence; and/or
- (c) any other relevant statutory or regulatory provisions;

by either the Office of Rail and Road or the Secretary of State for Transport or any other competent body including change procedures and any other consents, approvals of any access or beneficiary that may be required in relation to the authorised development;

“specified work” means so much of any of the authorised development as is situated upon, across, under, over or within 15 metres of, or may in any way adversely affect, railway property and, for the avoidance of doubt, includes the maintenance of such works under the powers conferred by article 4 (maintenance of authorised development) in respect of such works.

3.—(1) Where under this Part of this Schedule Network Rail is required to give its consent or approval in respect of any matter, that consent or approval is subject to the condition that Network Rail complies with any relevant railway operational procedures and any obligations under its network licence or under statute.

(2) In so far as any specified work or the acquisition or use of railway property is or may be subject to railway operational procedures, Network Rail must—

- (a) co-operate with the undertaker with a view to avoiding undue delay and securing conformity as between any plans approved by the engineer and requirements emanating from those procedures; and
- (b) use their reasonable endeavours to avoid any conflict arising between the application of those procedures and the proper implementation of the authorised development pursuant to this Order.

4.—(1) The undertaker must not exercise the powers conferred by—

- (a) article 3 (development consent granted by the Order);
- (b) article 4 (maintenance of authorised project);
- (c) article 15 (discharge of water);
- (d) article 17 (authority to survey and investigate the land onshore);
- (e) article 18 (compulsory acquisition of land);
- (f) article 21 (compulsory acquisition of rights);
- (g) article 25 (acquisition of subsoil only);
- (h) article 24 (power to override easements and other rights);
- (i) article 28 (temporary use of land for carrying out the authorised project);
- (j) article 29 (temporary use of land for maintaining the authorised project);
- (k) article 30 (statutory undertakers);
- (l) article 22 (private rights);
- (m) article 36 (felling or lopping of trees or shrubs);
- (n) article 37 (trees subject to tree preservation orders);

- (o) the powers conferred by section 11(3) (power of entry) of the 1965 Act;
- (p) the powers conferred by section 203 (power to override easements and rights) of the Housing and Planning Act 2016;
- (q) the powers conferred by section 172 (right to enter and survey land) of the Housing and Planning Act 2016;
- (r) any powers under in respect of the temporary possession of land under the Neighbourhood Planning Act 2017;

in respect of any railway property unless the exercise of such powers is with the consent of Network Rail.

(2) The undertaker must not in the exercise of the powers conferred by this Order prevent pedestrian or vehicular access to any railway property, unless preventing such access is with the consent of Network Rail.

(3) The undertaker must not exercise the powers conferred by sections 271 or 272 of the 1990 Act, article 30 (statutory undertakers), article 24 (power to override easements and other rights) or article 22 (private rights), in relation to any right of access of Network Rail to railway property, but such right of access may be diverted with the consent of Network Rail.

(4) The undertaker must not under the powers of this Order acquire or use or acquire new rights over, or seek to impose any restrictive covenants over, any railway property, or extinguish any existing rights of Network Rail in respect of any third party property, except with the consent of Network Rail.

(5) The undertaker must not under the powers of this Order do anything which would result in railway property being incapable of being used or maintained or which would affect the safe running of trains on the railway.

(6) Where Network Rail is asked to give its consent pursuant to this paragraph, such consent must not be unreasonably withheld but may be given subject to reasonable conditions but it shall never be unreasonable to withhold consent for reasons of operational or railway safety (such matters to be in Network Rail's absolute discretion).

(7) The undertaker must enter into an asset protection agreement prior to the carrying out of any specified work.

5.—(1) The undertaker must not submit the construction traffic management plan to the relevant planning authority in accordance with requirement 19 of Part 3 of Schedule 1 (construction traffic management plan) without having first obtained the written approval of Network Rail in respect of all provisions relating to Cranswick Level Crossing, Driffield Level Crossing and safety briefings for HGV drivers on the safe use of level crossings affected by the authorised project in accordance with sub-paragraph (2).

(2) The undertaker must provide Network Rail with a draft of the construction traffic management plan for approval and Network Rail must within a period of 28 days beginning with the date on which the draft construction traffic management plan is received by Network Rail and acting reasonably serve written notice on the undertaker confirming that—

- (a) the draft construction traffic management plan is approved; or
- (b) the draft construction traffic management plan is approved subject to reasonable amendments as required by Network Rail; or
- (c) the draft construction traffic management plan is not approved and the reason for the non-approval; or
- (d) that further information is required in order for Network Rail to make its determination (in which case this paragraph 5(2) must apply to such further information from the date of its receipt by Network Rail).

(3) In the event that Network Rail fails to serve written notice in accordance with paragraph 5(2) within 28 days of receipt Network Rail is deemed to have served a notice pursuant to paragraph 5(2)(a).

(4) The undertaker must include any reasonable amendments which are required by Network Rail and notified to the undertaker by Network Rail in the notice given pursuant to paragraph 5(2)(b) in the draft construction traffic management plan it submits to the relevant planning authority in accordance with requirement 19 of Part 3 of Schedule 1 (construction traffic management plan) and the undertaker must not submit any such written details that relate to Cranswick Level Crossing, Driffield Level Crossing and/or safety briefings for HGV drivers on the safe use of level crossings affected by the authorised project to the relevant planning authority which have not been approved by Network Rail in accordance with paragraphs 5(2) or 5(3).

(5) Each notice and all other information required to be sent to Network Rail under the terms of this paragraph 5 must—

- (a) be sent to the Company Secretary and General Counsel at Network Rail Infrastructure Limited, 1 Eversholt Street, London, NW1 2DN via Royal Mail plc's special delivery service (or if this service is no longer being provided an appropriate recorded delivery postal service) and marked for the attention of the Level Crossing Manager; and
- (b) contain a clear statement on its front page that Network Rail must respond within 28 days of receipt.

(6) In the event that any subsequent changes are made to the construction traffic management plan following consultation with Network Rail, in so far as such changes impact on railway property, the undertaker must not submit any such written details to the relevant planning authorities or finalise any updates to the construction traffic management plan without further consultation with Network Rail.

6.—(1) The undertaker must before commencing construction of any specified work supply to Network Rail proper and sufficient plans of that work for the reasonable approval of the engineer and the specified work must not be commenced except in accordance with such plans as have been approved in writing by the engineer or settled by arbitration.

(2) The approval of the engineer under sub-paragraph (1) must not be unreasonably withheld, and if by the end of the period of 28 days beginning with the date on which such plans have been supplied to Network Rail the engineer has not intimated their disapproval of those plans and the grounds of such disapproval the undertaker may serve upon the engineer written notice requiring the engineer to intimate approval or disapproval within a further period of 28 days beginning with the date upon which the engineer receives written notice from the undertaker. If by the expiry of the further 28 days the engineer has not intimated approval or disapproval, the engineer shall be deemed to have approved the plans as submitted.

(3) If by the end of the period of 28 days beginning with the date on which written notice was served upon the engineer under sub-paragraph (2), Network Rail gives notice to the undertaker that Network Rail desires itself to construct any part of a specified work which in the opinion of the engineer will or may affect the stability of railway property or the safe operation of traffic on the railways of Network Rail then, if the undertaker desires such part of the specified work to be constructed, Network Rail must construct it without unnecessary delay on behalf of and to the reasonable satisfaction of the undertaker in accordance with the plans approved or deemed to be approved or settled under this paragraph, and under the supervision (where appropriate and if given) of the undertaker.

(4) When signifying their approval of the plans the engineer may specify any protective works (whether temporary or permanent) which in the engineer's opinion should be carried out before the commencement of the construction of a specified work to ensure the safety or stability of railway property or the continuation of safe and efficient operation of the railways of Network Rail or the services of operators using the same (including any relocation de-commissioning and removal of works, apparatus and equipment necessitated by a specified work and the comfort and safety of passengers who may be affected by the specified works), and such protective works as may be reasonably necessary for those purposes must be constructed by Network Rail or by the undertaker, if Network Rail so desires, and such protective works must be carried out at the expense of the undertaker in either case without unnecessary delay and the undertaker must not commence the construction of the specified works until the engineer has notified the undertaker that the protective works have been completed to their reasonable satisfaction.

7.—(1) Any specified work and any protective works to be constructed by virtue of paragraph 6(4) must, when commenced, be constructed—

- (a) without unnecessary delay in accordance with the plans approved or deemed to have been approved or settled under paragraph 6;
- (b) under the supervision (where appropriate and if given) and to the reasonable satisfaction of the engineer;
- (c) in such manner as to cause as little damage as is possible to railway property; and
- (d) so far as is reasonably practicable, so as not to interfere with or obstruct the free, uninterrupted and safe use of any railway of Network Rail or the traffic thereon and the use by passengers of railway property.

(2) If any damage to railway property or any such interference or obstruction shall be caused by the carrying out of, or in consequence of the construction of a specified work, the undertaker must, notwithstanding any such approval make good such damage and must pay to Network Rail all reasonable expenses to which Network Rail may be put and compensation for any loss which it may sustain by reason of any such damage, interference or obstruction.

(3) Nothing in this Part of this Schedule imposes any liability on the undertaker with respect to any damage, costs, expenses or loss attributable to the negligence of Network Rail or its servants, contractors or agents or any liability on Network Rail with respect of any damage, costs, expenses or loss attributable to the negligence of the undertaker or its servants, contractors or agents.

8. The undertaker must—

- (a) at all times afford reasonable facilities to the engineer for access to a specified work during its construction; and
- (b) supply the engineer with all such information as they may reasonably require with regard to a specified work or the method of constructing it.

9. Network Rail must at all times afford reasonable facilities to the undertaker and its agents for access to any works carried out by Network Rail under this Part of this Schedule during their construction and must supply the undertaker with such information as it may reasonably require with regard to such works or the method of constructing them.

10.—(1) If any permanent or temporary alterations or additions to railway property are reasonably necessary in consequence of the construction or completion of a specified work in order to ensure the safety of railway property or the continued safe operation of the railway of Network Rail, such alterations and additions may be carried out by Network Rail and if Network Rail gives to the undertaker 56 days' notice (or in the event of an emergency or safety critical issue such notice as is reasonable in the circumstances) of its intention to carry out such alterations or additions (which must be specified in the notice), the undertaker must pay to Network Rail the reasonable cost of those alterations or additions including, in respect of any such alterations and additions as are to be permanent, a capitalised sum representing the increase of the costs which may be expected to be reasonably incurred by Network Rail in maintaining, working and, when necessary, renewing any such alterations or additions.

(2) If during the construction of a specified work by the undertaker, Network Rail gives notice to the undertaker that Network Rail desires itself to construct that part of the specified work which in the opinion of the engineer is endangering the stability of railway property or the safe operation of traffic on the railways of Network Rail then, if the undertaker decides that part of the specified work is to be constructed, Network Rail must assume construction of that part of the specified work and the undertaker must, notwithstanding any such approval of a specified work under paragraph 6(3), pay to Network Rail all reasonable expenses to which Network Rail may be put and compensation for any loss which it may suffer by reason of the execution by Network Rail of that specified work.

(3) The engineer must, in respect of the capitalised sums referred to in this paragraph and paragraph 11(a) provide such details of the formula by which those sums have been calculated as the undertaker may reasonably require.

(4) If the cost of maintaining, working or renewing railway property is reduced in consequence of any such alterations or additions a capitalised sum representing such saving must be set off against any sum payable by the undertaker to Network Rail under this paragraph.

11. The undertaker must repay to Network Rail all reasonable fees, costs, charges and expenses reasonably incurred by Network Rail—

- (a) in constructing any part of a specified work on behalf of the undertaker as provided by paragraph 6(3) or in constructing any protective works under the provisions of paragraph 6(4) including, in respect of any permanent protective works, a capitalised sum representing the cost of maintaining and renewing those works;
- (b) in respect of the approval by the engineer of plans submitted by the undertaker and the supervision by the engineer of the construction of a specified work;
- (c) in respect of the employment or procurement of the services of any inspectors, signallers, watch-persons and other persons whom it shall be reasonably necessary to appoint for inspecting, signalling, watching and lighting railway property and for preventing, so far as may be reasonably practicable, interference, obstruction, danger or accident arising from the construction or failure of a specified work;
- (d) in respect of any special traffic working resulting from any speed restrictions which may in the opinion of the engineer, require to be imposed by reason or in consequence of the construction or failure of a specified work or from the substitution or diversion of services which may be reasonably necessary for the same reason; and
- (e) in respect of any additional temporary lighting of railway property in the vicinity of the specified works, being lighting made reasonably necessary by reason or in consequence of the construction or failure of a specified work.

12.—(1) In this paragraph—

“EMI” means, subject to sub-paragraph (2), electromagnetic interference with Network Rail’s apparatus generated by the operation of the authorised development where such interference is of a level which adversely affects the safe operation of Network Rail’s apparatus; and

“Network Rail’s apparatus” means any lines, circuits, wires, apparatus or equipment (whether or not modified or installed as part of the authorised development) which are owned or used by Network Rail for the purpose of transmitting or receiving electrical energy or of radio, telegraphic, telephonic, electric, electronic or other like means of signalling or other communications.

(2) This paragraph applies to EMI only to the extent that such EMI is not attributable to any change to Network Rail’s apparatus carried out after approval of plans under paragraph 6(1) for the relevant part of the authorised development giving rise to EMI (unless the undertaker has been given notice in writing before the approval of those plans of the intention to make such change).

(3) Subject to sub-paragraph (5), the undertaker must in the design and construction of the authorised development take all measures necessary to prevent EMI and must establish with Network Rail (both parties acting reasonably) appropriate arrangements to verify their effectiveness.

(4) In order to facilitate the undertaker’s compliance with sub-paragraph (3)—

- (a) the undertaker must consult with Network Rail as early as reasonably practicable to identify all Network Rail’s apparatus which may be at risk of EMI, and thereafter must continue to consult with Network Rail (both before and after formal submission of plans under paragraph 6(1)) in order to identify all potential causes of EMI and the measures required to eliminate them;
- (b) Network Rail must make available to the undertaker all information in the possession of Network Rail reasonably requested by the undertaker in respect of Network Rail’s apparatus identified pursuant to sub-paragraph (a); and
- (c) Network Rail must allow the undertaker reasonable facilities for the inspection of Network Rail’s apparatus identified pursuant to sub-paragraph (a).

(5) In any case where it is established that EMI can only reasonably be prevented by modifications to Network Rail's apparatus, Network Rail must not withhold its consent unreasonably to modifications of Network Rail's apparatus, but the means of prevention and the method of their execution must be selected in the reasonable discretion of Network Rail, and in relation to such modifications paragraph 6(1) has effect subject to the sub-paragraph.

(6) Prior to the commencement of operation of the authorised development the undertaker shall test the use of the authorised development in a manner that shall first have been agreed with Network Rail and if, notwithstanding any measures adopted pursuant to sub-paragraph (3), the testing of the authorised development causes EMI then the undertaker must immediately upon receipt of notification by Network Rail of such EMI either in writing or communicated orally (such oral communication to be confirmed in writing as soon as reasonably practicable after it has been issued) forthwith cease to use (or procure the cessation of use of) the undertaker's apparatus causing such EMI until all measures necessary have been taken to remedy such EMI by way of modification to the source of such EMI or (in the circumstances, and subject to the consent, specified in sub-paragraph (5)) to Network Rail's apparatus.

(7) In the event of EMI having occurred—

- (a) the undertaker must afford reasonable facilities to Network Rail for access to the undertaker's apparatus in the investigation of such EMI;
- (b) Network Rail must afford reasonable facilities to the undertaker for access to Network Rail's apparatus in the investigation of such EMI;
- (c) Network Rail must make available to the undertaker any additional material information in its possession reasonably requested by the undertaker in respect of Network Rail's apparatus or such EMI; and
- (d) the undertaker shall not allow the use or operation of the authorised development in a manner that has caused or will cause EMI until measures have been taken in accordance with this paragraph to prevent EMI occurring.

(8) Where Network Rail approves modifications to Network Rail's apparatus pursuant to sub-paragraphs (5) or (6)—

- (a) Network Rail must allow the undertaker reasonable facilities for the inspection of the relevant part of Network Rail's apparatus;
- (b) any modifications to Network Rail's apparatus approved pursuant to those sub-paragraphs must be carried out and completed by the undertaker in accordance with paragraph 7.

(9) To the extent that it would not otherwise do so, the indemnity in paragraph 16(1) applies to the costs and expenses reasonably incurred or losses suffered by Network Rail through the implementation of the provisions of this paragraph (including costs incurred in connection with the consideration of proposals, approval of plans, supervision and inspection of works and facilitating access to Network Rail's apparatus) or in consequence of any EMI to which sub-paragraph (6) applies.

(10) For the purpose of paragraph 11(a) any modifications to Network Rail's apparatus under this paragraph shall be deemed to be protective works referred to in that paragraph.

13. If at any time after the completion of a specified work, not being a work vested in Network Rail, Network Rail gives notice to the undertaker informing it that the state of maintenance of any part of the specified work appears to be such as adversely affects the operation of railway property, the undertaker must, on receipt of such notice, take such steps as may be reasonably necessary to put that specified work in such state of maintenance as not adversely to affect railway property.

14. The undertaker must not provide any illumination or illuminated sign or signal on or in connection with a specified work in the vicinity of any railway belonging to Network Rail unless it has first consulted Network Rail and it must comply with Network Rail's reasonable requirements for preventing confusion between such illumination or illuminated sign or signal and

any railway signal or other light used for controlling, directing or securing the safety of traffic on the railway.

15. Any additional expenses which Network Rail may reasonably incur in altering, reconstructing or maintaining railway property under any powers existing at the making of this Order by reason of the existence of a specified work must, provided that 56 days' previous notice of the commencement of such alteration, reconstruction or maintenance has been given to the undertaker, be repaid by the undertaker to Network Rail.

16.—(1) The undertaker must pay to Network Rail all reasonable costs, charges, damages and expenses not otherwise provided for in this Part of this Schedule which may be occasioned to or reasonably incurred by Network Rail—

- (a) by reason of the construction, maintenance or operation of a specified work or the failure thereof; or
- (b) by reason of any act or omission of the undertaker or of any person in its employ or of its contractors or others whilst engaged upon a specified work,
- (c) by reason of any act or omission of the undertaker or any person in its employ or of its contractors or others whilst accessing to or egressing from the authorised development;
- (d) in respect of any damage caused to or additional maintenance required to, railway property or any such interference or obstruction or delay to the operation of the railway as a result of access to or egress from the authorised development by the undertaker or any person in its employ or of its contractors or others;
- (e) in respect of costs incurred by Network Rail in complying with any railway operational procedures or obtaining any regulatory consents which procedures are required to be followed or consents obtained to facilitate the carrying out or operation of the authorised development;

and the undertaker must indemnify and keep indemnified Network Rail from and against all claims and demands arising out of or in connection with a specified work or any such failure, act or omission: and the fact that any act or thing may have been done by Network Rail on behalf of the undertaker or in accordance with plans approved by the engineer or in accordance with any requirement of the engineer or under the engineer's supervision shall not (if it was done without negligence on the part of Network Rail or of any person in its employ or of its contractors or agents) excuse the undertaker from any liability under the provisions of this sub-paragraph.

(2) Network Rail must—

- (a) give the undertaker reasonable written notice of any such claims or demands;
- (b) not make any settlement or compromise of such a claim or demand without the prior consent of the undertaker; and
- (c) take such steps as are within its control and are reasonable in the circumstances to mitigate any liabilities relating to such claims or demands.

(3) The sums payable by the undertaker under sub-paragraph (1) shall if relevant include a sum equivalent to the relevant costs.

(4) Subject to the terms of any agreement between Network Rail and a train operator regarding the timing or method of payment of the relevant costs in respect of that train operator, Network Rail must promptly pay to each train operator the amount of any sums which Network Rail receives under sub-paragraph (3) which relates to the relevant costs of that train operator.

(5) The obligation under sub-paragraph (3) to pay Network Rail the relevant costs shall, in the event of default, be enforceable directly by any train operator concerned to the extent that such sums would be payable to that operator pursuant to sub-paragraph (4).

(6) In this paragraph—

“the relevant costs” means the costs, losses and expenses (including loss of revenue) reasonably incurred by each train operator as a consequence of any specified work including but not limited to any restriction of the use of Network Rail's railway network as a result of

the construction, maintenance or failure of a specified work or any such act or omission as mentioned in sub-paragraph (1); and

“train operator” means any person who is authorised to act as the operator of a train by a licence under section 8 of the Railways Act 1993.

17. Network Rail must, on receipt of a request from the undertaker, from time to time provide the undertaker free of charge with written estimates of the costs, charges, expenses and other liabilities for which the undertaker is or will become liable under this Part of this Schedule (including the amount of the relevant costs mentioned in paragraph 16) and with such information as may reasonably enable the undertaker to assess the reasonableness of any such estimate or claim made or to be made pursuant to this Part of this Schedule (including any claim relating to those relevant costs).

18. In the assessment of any sums payable to Network Rail under this Part of this Schedule there must not be taken into account any increase in the sums claimed that is attributable to any action taken by or any agreement entered into by Network Rail if that action or agreement was not reasonably necessary and was taken or entered into with a view to obtaining the payment of those sums by the undertaker under this Part of this Schedule or increasing the sums so payable.

19. The undertaker and Network Rail may, subject in the case of Network Rail to compliance with the terms of its network licence, enter into, and carry into effect, agreements for the transfer to the undertaker of—

- (a) any railway property shown on the works and land plans and described in the book of reference;
- (b) any lands, works or other property held in connection with any such railway property; and
- (c) any rights and obligations (whether or not statutory) of Network Rail relating to any railway property or any lands, works or other property referred to in this paragraph.

20. Nothing in this Order, or in any enactment incorporated with or applied by this Order, prejudices or affects the operation of Part I of the Railways Act 1993.

21. The undertaker must give written notice to Network Rail if any application is proposed to be made by the undertaker for the Secretary of State’s consent under article 5 (benefit of the Order) of this Order and any such notice must be given no later than 28 days before any such application is made and must describe or give (as appropriate)—

- (a) the nature of the application to be made;
- (b) the extent of the geographical area to which the application relates; and
- (c) the name and address of the person acting for the Secretary of State to whom the application is to be made.

22. The undertaker must no later than 28 days from the date that the plans submitted to and certified by the Secretary of State in accordance with article 38 (certification of plans, etc.) are certified by the Secretary of State, provide a set of those plans to Network Rail in a format specified by Network Rail.

23. In relation to any dispute arising under this Part of this Schedule (except for those disputes referred to in paragraph 12) the provisions of article 39 (arbitration) shall not apply and any such dispute, unless otherwise provided for, must be referred to and settled by a single arbitrator to be agreed between the parties or, failing agreement, to be appointed on the application of either party (after giving notice in writing to the other) to the President of the Institution of Civil Engineers.

PART 5

FOR THE PROTECTION OF THE ENVIRONMENT AGENCY

1.—(1) The following provisions shall apply for the protection of the Agency unless otherwise agreed in writing between the undertaker and the Agency.

(2) In this Part of this Schedule—

“the Agency” means the Environment Agency;

“construction” includes execution, placing, altering, replacing, relaying and removal and excavation and “construct” and “constructed” shall be construed accordingly;

“drainage work” means any main river and includes any land which provides or is expected to provide flood storage capacity for any main river and any bank, wall, embankment or other structure, or any appliance, constructed or used for land drainage, flood defence or tidal monitoring;

“the fishery” means any waters containing fish and fish in, or migrating to or from, such waters and the spawn, spawning ground, habitat or food of such fish;

“main river” means all watercourses shown as such on the statutory main river maps held by the Agency and the Department for Environment, Food and Rural Affairs including any structure or appliance for controlling or regulating the flow of water in or out of the channel;

“plans” includes sections, drawings, specifications, calculations and method statements;

“specified work” means so much of any work or operation authorised by this Order as is in, on, under, over or within 16 metres of a drainage work or is otherwise likely to—

- (a) affect any drainage work or the volumetric rate of flow of water in or flowing to or from any drainage work;
- (b) affect the flow, purity or quality of water in any watercourse or other surface waters or ground water;
- (c) cause obstruction to the free passage of fish or damage to any fishery;
- (d) affect the conservation, distribution or use of water resources.; or
- (e) affect the conservation value of the main river and habitats in its immediate vicinity; and

“watercourse” includes all rivers, streams, ditches, drains, cuts, culverts, dykes, sluices, basins, sewers and passages through which water flows except a public sewer.

2.—(1) Before beginning to construct any specified work, the undertaker must submit to the Agency plans of the specified work and such further particulars available to it as the Agency may within 28 days of the receipt of the plans reasonably request.

(2) Any such specified work must not be constructed except in accordance with such plans as may be approved in writing by the Agency, or determined under paragraph 11.

(3) Any approval of the Agency required under this paragraph—

- (a) must not be unreasonably withheld or delayed;
- (b) is deemed to have been refused if it is neither given nor refused within 2 months of the submission of the plans or receipt of further particulars if such particulars have been requested by the Agency for approval; and
- (c) may be given subject to such reasonable requirements as the Agency may have for the protection of any drainage work or the fishery or for the protection of water resources, or for the prevention of flooding or pollution or in the discharge of its environmental duties.

(4) The Agency must use its reasonable endeavours to respond to the submission of any plans before the expiration of the period mentioned in sub-paragraph (3)(b).

3. Without limiting paragraph 2, the requirements which the Agency may have under that paragraph include conditions requiring the undertaker at its own expense to construct such protective works, whether temporary or permanent, before or during the construction of the specified works (including the provision of flood banks, walls or embankments or other new works and the strengthening, repair or renewal of existing banks, walls or embankments) as are reasonably necessary—

- (a) to safeguard any drainage work against damage; or
- (b) to secure that its efficiency for flood defence purposes is not impaired and that the risk of flooding is not otherwise increased,

by reason of any specified work.

4.—(1) Subject to sub-paragraph (2), any specified work, and all protective works required by the Agency under paragraph 3, must be constructed—

- (a) without unreasonable delay in accordance with the plans approved under this Part; and
- (b) to the reasonable satisfaction of the Agency, and the Agency shall be entitled by its officer to watch and inspect the construction of such works.

(2) The undertaker must give to the Agency not less than 14 days' notice in writing of its intention to commence construction of any specified work and notice in writing of its completion not later than 7 days after the date on which it is completed.

(3) If the Agency reasonably requires, the undertaker must construct all or part of the protective works so that they are in place prior to the construction of any specified work.

(4) If any part of a specified work or any protective work required by the Agency is constructed otherwise than in accordance with the requirements of this Part, the Agency may by notice in writing require the undertaker at the undertaker's own expense to comply with the requirements of this Part or (if the undertaker so elects and the Agency in writing consents, such consent not to be unreasonably withheld or delayed) to remove, alter or pull down the work and, where removal is required, to restore the site to its former condition to such extent and within such limits as the Agency reasonably requires.

(5) Subject to sub-paragraph (6) and paragraph 9, if, within a reasonable period, being not less than 28 days beginning with the date when a notice under sub-paragraph (4) is served upon the undertaker, the undertaker has failed to begin taking steps to comply with the requirements of the notice and has not subsequently made reasonably expeditious progress towards their implementation, the Agency may execute the works specified in the notice, and any expenditure incurred by the Agency in so doing shall be recoverable from the undertaker.

(6) In the event of any dispute as to whether sub-paragraph (4) is properly applicable to any work in respect of which notice has been served under that sub-paragraph, or as to the reasonableness of any requirement of such a notice, the Agency shall not, except in the case of an emergency, exercise the powers conferred by sub-paragraph (4) until the dispute has been finally determined in accordance with paragraph 11.

5.—(1) Subject to sub-paragraph (6) the undertaker must from the commencement of the construction of the specified works maintain in good repair and condition and free from obstruction any drainage work which is situated within the limits of deviation and on land held by the undertaker for the purposes of or in connection with the specified works, whether or not the drainage work is constructed under the powers conferred by this Order or is already in existence.

(2) If any such drainage work which the undertaker is liable to maintain is not maintained to the reasonable satisfaction of the Agency, the Agency may by notice in writing require the undertaker to repair and restore the work, or any part of such work, or (if the undertaker so elects and the Agency in writing consents, such consent not to be unreasonably withheld or delayed), to remove the work and restore the site to its former condition, to such extent and within such limits as the Agency reasonably requires.

(3) Subject to sub-paragraph (5) and paragraph 9, if, within a reasonable period, being not less than 28 days beginning with the date on which a notice in respect of any drainage work is served under sub-paragraph (2) on the undertaker, the undertaker has failed to begin taking steps to comply with the requirements of the notice and has not subsequently made reasonably expeditious progress towards their implementation, the Agency may do what is necessary for such compliance and any expenditure incurred by the Agency in so doing shall be recoverable from the undertaker.

(4) If there is any failure by the undertaker to obtain consent or comply with conditions imposed by the Agency in accordance with these Protective Provisions the Agency may serve written notice requiring the undertaker to cease all or part of the specified works and the undertaker must cease the specified works or part thereof until it has obtained the consent or complied with the condition unless the cessation of the specified works or part thereof would cause greater damage than compliance with the written notice.

(5) In the event of any dispute as to the reasonableness of any requirement of a notice served under sub-paragraph (2), the Agency shall not, except in the case of an emergency, exercise the powers conferred by sub-paragraph (3) until the dispute has been finally determined in accordance with paragraph 11.

(6) This paragraph does not apply to drainage works which are vested in the Agency, or which the Agency or another person is liable to maintain and is not proscribed by the powers of the Order from doing so.

6. Subject to paragraph 9, if by reason of the construction of any specified work or of the failure of any such work, the efficiency of any drainage work for flood defence purposes is impaired, or that drainage work is otherwise damaged, such impairment or damage must be made good by the undertaker to the reasonable satisfaction of the Agency and if the undertaker fails to do so, the Agency may make good the impairment or damage and recover any expenditure incurred by the Agency in so doing from the undertaker.

7. If by reason of construction of the specified work the Agency's access to flood defences or equipment maintained for flood defence purposes is materially obstructed, the undertaker must provide such alternative means of access that will allow the Agency to maintain the flood defence or use the equipment no less effectively than was possible before the obstruction within 24 hours of the undertaker becoming aware of such obstruction.

8.—(1) The undertaker must take all such measures as may be reasonably practicable to prevent any interruption of the free passage of fish in the fishery during the construction of any specified work.

(2) If by reason of—

- (a) the construction of any specified work; or
- (b) the failure of any such work,

damage to the fishery is caused, or the Agency has reason to expect that such damage may be caused, the Agency may serve notice on the undertaker requiring it to take such steps as may be reasonably practicable to make good the damage, or, as the case may be, to protect the fishery against such damage.

(3) Subject to paragraph 9, if within such time as may be reasonably practicable for that purpose after the receipt of written notice from the Agency of any damage or expected damage to a fishery, the undertaker fails to take such steps as are described in sub-paragraph (2), the Agency may take those steps and any expenditure incurred by the Agency in so doing shall be recoverable from the undertaker.

(4) Subject to paragraph 9, in any case where immediate action by the Agency is reasonably required in order to secure that the risk of damage to the fishery is avoided or reduced, the Agency may take such steps as are reasonable for the purpose, and may recover from the undertaker any expenditure incurred in so doing provided that notice specifying those steps is served on the undertaker as soon as reasonably practicable after the Agency has taken, or commenced to take, the steps specified in the notice.

9. The undertaker shall indemnify the Agency in respect of all costs, charges and expenses which the Agency may incur—

- (a) in the examination or approval of plans under this Part;
- (b) in the inspection of the construction of the specified works or any protective works required by the Agency under this Part; and
- (c) in the carrying out of any surveys or tests by the Agency which are reasonably required in connection with the construction of the specified works.

10.—(1) The undertaker is responsible for and shall indemnify the Agency against all costs and losses not otherwise provided for in this Part which may be incurred or suffered by the Agency by reason of—

- (a) the construction, operation or maintenance of any specified works comprised within the authorised works or the failure of any such works comprised within them; or
- (b) any act or omission of the undertaker, its employees, contractors or agents or others whilst engaged upon the construction, operation or maintenance of the authorised works or dealing with any failure of the authorised works.

(2) For the avoidance of doubt, in sub-paragraph (1)—

“costs” includes—

- (a) expenses and charges;
- (b) staff costs and overheads;
- (c) legal costs;

“losses” includes physical damage.

(3) The undertaker shall indemnify the Agency against all liabilities, claims and demands arising out of or in connection with the authorised works or otherwise out of the matters referred to in sub-paragraph (1)(a) and (1)(b).

(4) For the avoidance of doubt, in sub-paragraph (3)—

“claims” and “demands” include as applicable—

- (a) costs (within the meaning of sub-paragraph (2)) incurred in connection with any claim or demand; and
- (b) any interest element of sums claimed or demanded;

“liabilities” includes—

- (a) contractual liabilities;
- (b) tortious liabilities (including liabilities for negligence or nuisance);
- (c) liabilities to pay statutory compensation or for breach of statutory duty;
- (d) liabilities to pay statutory penalties imposed on the basis of strict liability (but does not include liabilities to pay other statutory penalties).

(5) The Agency must give to the undertaker reasonable notice of any such claim or demand, and no settlement or compromise shall be made without the agreement of the undertaker which agreement shall not be unreasonably withheld or delayed.

(6) The fact that any work or thing has been executed or done by the undertaker in accordance with a plan approved by the Agency, or to its satisfaction, or in accordance with any directions or award of an arbitrator, shall not relieve the undertaker from any liability under the provisions of this Part.

11. Any dispute arising between the undertaker and the Agency under this Part shall, if the parties agree, be determined by arbitration under article 39 (arbitration), but shall otherwise be determined by the Secretary of State for Environment, Food and Rural Affairs or its successor and the Secretary of State for Business, Energy and Industrial Strategy or its successor acting jointly on a reference to them by the undertaker or the Agency, after notice in writing by one to the other.

PART 6

FOR THE PROTECTION OF DRAINAGE AUTHORITIES

1. The provisions of this Part have effect for the protection of the drainage authority unless otherwise agreed in writing between the undertaker and the drainage authority.

2. In this Part of this Schedule—

“construction” includes execution, placing, altering, replacing, relaying and removal and excavation and “construct” and “constructed” is to be construed accordingly;

“drainage authority” means in relation to an ordinary watercourse, the drainage board concerned within the meaning of section 23 (prohibition on obstructions etc. in watercourses) of the Land Drainage Act 1991;

“drainage work” means any ordinary watercourse and includes any bank, wall, embankment or other structure, or any appliance, constructed or used for land drainage or flood defence in connection with an ordinary watercourse which is the responsibility of the drainage authority;

“independent review” means a review carried out by a third party confirming the findings of the undertaker in the assessment of the impact of the proposed specified work on flood risk;

“ordinary watercourse” has the meaning given by section 72 (interpretation) of the Land Drainage Act 1991;

“plans” includes any information reasonably required by the drainage authority including location details, grid references, sections, drawings, specifications, assessments and method statements; and

“specified work” means so much of any work or operation authorised by this Order as is in, on, under over or within 9 metres of a drainage work and which comprises any of the following works carried out in relation to or which may affect any ordinary watercourse—

- (a) the erection of any mill, dam, weir, or other similar obstruction to the flow of an ordinary watercourse, or raising or otherwise altering any such obstruction;
- (b) the construction or installation of a bridge or other structure;
- (c) the erection of a culvert in an ordinary watercourse;
- (d) the alteration of an ordinary watercourse or a culvert or other form of drainage infrastructure in a manner that would be likely to affect the flow of an ordinary watercourse;
- (e) the introduction by means of any channel, siphon, pipeline or sluice or by any other means whatsoever any water into any ordinary watercourse within the Order limits so as to directly or indirectly increase the flow or volume of water in any ordinary watercourse within the Order limits without the previous consent of the drainage authority;
- (f) any work likely to obstruct flow or adversely affect the integrity of any embankment, wall or enclosing structure containing an ordinary watercourse.

3.—(1) Before commencing construction of a specified work, the undertaker must submit to the drainage authority plans of the specified work, including an independent review and such further particulars available to it as the drainage authority may within 14 days of the submission of the plans reasonably request.

(2) The undertaker must not commence construction of the specified work until approval, unconditionally or conditionally, has been given as provided in this paragraph.

(3) A specified work must not be constructed except in accordance with such plans as may be approved in writing by the drainage authority or determined under paragraph 12.

(4) Any approval of the drainage authority required under this paragraph—

- (a) must not be unreasonably withheld or delayed;
- (b) is deemed to have been given if it is neither given nor refused within 56 days of the submission of the plans for approval, or submission of further particulars (where required by the drainage authority under sub-paragraph (1)) whichever is the later; and
- (c) may be given subject to such reasonable requirements as the drainage authority may make for the protection of any drainage work, for the protection of any ordinary watercourse or for the prevention of flooding.

(5) Any refusal under this paragraph must be accompanied by a statement of the reasons for refusal.

4. Without limiting paragraph 3, the requirements which the drainage authority may make under that paragraph include conditions requiring the undertaker at its own expense to construct such protective works, whether temporary or permanent, during the construction of the specified work

(including the provision of flood banks, walls or embankments or other new works and the strengthening, repair or renewal of existing banks, walls or embankments) as are reasonably necessary—

- (a) to safeguard any drainage work against damage by reason of any specified work; or
- (b) to secure that the efficiency of any drainage work for flood defence and land drainage purposes is not impaired, and that the risk of flooding is not otherwise increased, by reason of any specified work.

5.—(1) Subject to sub-paragraph (2), any specified work, and all protective works required by the drainage authority under paragraph 4, must be constructed—

- (a) without unreasonable delay in accordance with the plans approved or deemed to have been approved or settled under this Part of this Schedule; and
- (b) to the reasonable satisfaction of the drainage authority, and an officer of the drainage authority is entitled to watch and inspect the construction of such works.

(2) The undertaker must give to the drainage authority—

- (a) not less than 14 days' notice in writing of its intention to commence construction of any specified work; and
- (b) notice in writing of its completion not later than 7 days after the date of completion.

(3) If the drainage authority reasonably requires, the undertaker must construct all or part of the protective works so that they are in place before the construction of the specified work to which the protective works relate.

(4) If any part of a specified work or any protective work required by the drainage authority is constructed otherwise than in accordance with the requirements of this Part of this Schedule, the drainage authority may by notice in writing require the undertaker at the undertaker's expense to comply with the requirements of this Part of this Schedule or (if the undertaker so elects and the drainage authority in writing consents, such consent not to be unreasonably withheld or delayed) to remove, alter or pull down the work and, where removal is agreed, to restore the site to its former condition to such extent and within such limits as the drainage authority reasonably requires.

(5) Subject to sub-paragraph (6) and paragraphs 9 and 10, if within a reasonable period, being not less than 28 days from the date when a notice under sub-paragraph (4) is served on the undertaker, the undertaker has failed to begin taking steps to comply with the requirements of the notice and subsequently to make reasonably expeditious progress towards their implementation, the drainage authority may execute the works specified in the notice and any reasonable expenditure incurred by it in so doing is recoverable from the undertaker.

(6) In the event of any dispute as to whether sub-paragraph (4) is properly applicable to any work in respect of which notice has been served under that sub-paragraph, or as to the reasonableness of any requirement of such a notice, the drainage authority must not except in an emergency exercise the powers conferred by sub-paragraph (5) until the dispute has been finally determined in accordance with paragraph 12.

6.—(1) Subject to sub-paragraph (5), the undertaker must from the commencement of the construction of the specified work maintain in good repair and condition and free from obstruction any drainage work which is situated within the limits of deviation on land held by the undertaker for the purpose of or in connection with the specified work, whether or not the drainage work is constructed under the powers conferred by this Order or is already in existence.

(2) If any drainage work which the undertaker is liable to maintain is not maintained to the reasonable satisfaction of the drainage authority, the drainage authority may by notice in writing require the undertaker to repair and restore the work, or any part of the work, or (if the undertaker so elects and the drainage authority in writing consents, such consent not to be unreasonably withheld or delayed), to remove the specified work and restore the site to its former condition, to such extent and within such limits as the drainage authority reasonably requires.

(3) Subject to sub-paragraph (4) and paragraphs 9 and 10, if, within a reasonable period being not less than 28 days beginning with the date on which a notice in respect of any drainage work is

served under sub-paragraph (2) on the undertaker, the undertaker has failed to begin taking steps to comply with the reasonable requirements of the notice and has not subsequently made reasonably expeditious progress towards their implementation, the drainage authority may do what is reasonably necessary for such compliance and may recover any reasonable expenditure reasonably incurred by it in so doing from the undertaker.

(4) In the event of any dispute as to the reasonableness of any requirement of a notice served under sub-paragraph (2), the drainage authority must not except in a case of emergency exercise the powers conferred by sub-paragraph (3) until the dispute has been finally determined in accordance with paragraph 12.

(5) This paragraph does not apply to—

- (a) drainage works which are vested in the drainage authority, or which the drainage authority or another person is liable to maintain and is not prevented by this Order from so doing; and
- (b) any obstruction of a drainage work for the purpose of a work or operation authorised by this Order and carried out in accordance with the provisions of this Part of this Schedule provided that any obstruction is removed as soon as reasonably practicable.

7. Subject to paragraphs 9 and 10 and paragraph 6(5)(b), if by reason of the construction of any specified work or of the failure of any such work the efficiency of any drainage work for flood defence purposes or land drainage is impaired, or that drainage work is otherwise damaged, such impairment or damage must be made good by the undertaker to the reasonable satisfaction of the drainage authority and, if the undertaker fails to do so, the drainage authority may make good the impairment or damage and recover from the undertaker any expenditure incurred by the drainage authority in so doing from the undertaker.

8. If by reason of the construction of the specified work the drainage authority's access to flood defences or equipment maintained for flood defence purposes is materially obstructed, the undertaker must provide such alternative means of access that will allow the drainage authority to maintain the flood defence or use the equipment no less effectively than was possible before the obstruction within 24 hours of the undertaker becoming aware of such obstruction.

9. The undertaker must make reasonable compensation for costs, charges and expenses which the drainage authority may reasonably incur—

- (a) in the examination or approval of plans under this Part of this Schedule;
- (b) in the inspection of the construction of the specified works or any protective works required by the drainage authority under this Part of this Schedule; and
- (c) in the carrying out of any surveys or tests by the drainage authority which are reasonably required in connection with the construction of the specified works.

10.—(1) The undertaker must make reasonable compensation for costs and losses which may be reasonably incurred or suffered by the drainage authority by reason of—

- (a) the construction of any specified work comprised within the authorised works; or
- (b) any act or omission of the undertaker, its employees, contractors or agents or others whilst engaged upon the construction of the specified works.

(2) In sub-paragraph (1)—

“costs” includes—

- (a) expenses and charges;
- (b) staff costs and overheads; and
- (c) legal costs; and

“losses” includes physical damage.

(3) The undertaker must make reasonable compensation for liabilities, claims and demands against the drainage authority arising out of or in connection with the specified works or otherwise out of the matters referred to in sub-paragraphs (1)(a) and (1)(b).

- (4) In sub-paragraph (3)—
“claims” and “demands” include as applicable—
- (a) costs (within the meaning of sub-paragraph (2)) incurred in connection with any claim or demand; and
 - (b) any interest element of sums claimed or demanded; and
- “liabilities” includes—
- (a) contractual liabilities;
 - (b) tortious liabilities (including liabilities for negligence or nuisance);
 - (c) liabilities to pay statutory compensation or for breach of statutory duty; and
 - (d) liabilities to pay statutory penalties imposed on the basis of strict liability (but does not include liabilities to pay other statutory penalties).
- (5) The drainage authority must give to the undertaker notice of any such claim or demand.
- (6) The undertaker may at its own expense conduct all negotiations for the settlement of the same and any litigation that may arise therefrom.
- (7) The drainage authority must not compromise or settle any such claim or make any admission which might be prejudicial to the claim without the agreement of the undertaker which agreement must not be unreasonably withheld or delayed.
- (8) The drainage authority must, at all times take reasonable steps to prevent and mitigate any such claims, demands, proceedings, costs, damages, expenses or loss.
- (9) The drainage authority must, at the request of the undertaker, afford all reasonable assistance for the purpose of contesting any such claim or action and is entitled to be repaid its reasonable expenses reasonably incurred in so doing.
- 11.** The fact that any work or thing has been executed or done by the undertaker in accordance with a plan approved or deemed to be approved by the drainage authority, or to its satisfaction, or in accordance with any directions or award of an arbitrator, does not relieve the undertaker from any liability under this Part of this Schedule.
- 12.** Any dispute arising between the undertaker and the drainage authority under this Part of this Schedule, if the parties agree, is to be determined by arbitration under article 39 (arbitration), but otherwise is to be determined by the Secretary of State for Business, Energy and Industrial Strategy on a reference to them by the undertaker or the drainage authority, after notice in writing by one to the other.

PART 7

FOR THE PROTECTION OF DOGGERBANK OFFSHORE WIND FARM PROJECT 1 PROJCO LIMITED AND DOGGERBANK OFFSHORE WIND FARM PROJECT 2 PROJCO LIMITED

- 1.** For the protection of Doggerbank Offshore Wind Farm Project 1 Projco Limited (Company No. 07791991) and Doggerbank Offshore Wind Farm Project 2 Projco Limited (Company No. 07914510) as referred to in this Part of this Schedule the following provisions have effect, unless otherwise agreed in writing between the undertaker and Dogger Bank.
- 2.** Part 1 of Schedule 9 shall not apply in respect of the interaction between the Hornsea Four authorised development and the Dogger Bank authorised development.
- 3.** In this Part of this Schedule—
“acceptable insurance” means a third party liability insurance effected and maintained by the undertaker to a level of not less than £50,000,000 (fifty million pounds) (or such lower amount as may be agreed by Dogger Bank) per occurrence or series of occurrences arising out of one event. Such insurance shall be maintained for the construction period of the authorised

development which constitute specified works and arranged with an internationally recognised insurer of repute operating in the London and worldwide insurance market underwriters whose security/credit rating meets the same requirements as an “acceptable credit provider”, such policy shall include (but without limitation)—

- (a) Dogger Bank as a Co-Insured;
- (b) a cross liabilities clause; and
- (c) contractors’ pollution liability for third party property damage and third party bodily damage arising from a pollution/contamination event with cover of £10,000,000.00 (ten million pounds) per event or £20,000,000.00 (twenty million pounds) in aggregate;

“Dogger Bank” means Doggerbank Offshore Wind Farm Project 1 Projco Limited (Company No. 07791991) and Doggerbank Offshore Wind Farm Project 2 Projco Limited (Company No. 07914510) whose registered office is at No.1 Forbury Place, 43 Forbury Road, Reading, United Kingdom, RG1 3JH;

“the Dogger Bank authorised development” means the onshore development authorised by the Dogger Bank Order;

“Dogger Bank limits of deviation” means the areas of the Dogger Bank Order land in respect of which the Dogger Bank authorised development may be constructed, in accordance with article 3(2) of the Dogger Bank Order;

“the Dogger Bank Order” means the Dogger Bank Creyke Beck Offshore Wind Farm Order 2015 (as amended);

“the Dogger Bank Order land” means the land or any part of it shown as falling within the Dogger Bank Order limits;

“ground mitigation scheme” means a scheme approved by Dogger Bank (such approval not to be unreasonably withheld or delayed) setting out the necessary measures (if any) for a ground subsidence event;

“ground monitoring scheme” means a scheme for monitoring ground subsidence which sets out the Dogger Bank authorised development which is to be subject to such monitoring, the extent of land to be monitored, the manner in which ground levels are to be monitored, the timescales of any monitoring activities and the extent of ground subsidence which, if exceeded, shall require the undertaker to submit for Dogger Bank’s approval a ground mitigation scheme;

“ground subsidence event” means any ground subsidence identified by the monitoring activities set out in the ground monitoring scheme that has exceeded the level described in the ground monitoring scheme as requiring a ground mitigation scheme; and

“the Hornsea Four authorised development” means the development authorised by this Order;

“the respective authorised developments” means the Dogger Bank authorised development and the Hornsea Four authorised development;

“specified works” means the carrying out of any of the authorised development over, under or within 15 metres of the Dogger Bank authorised development or in the event that the Dogger Bank authorised development has not been constructed within the Dogger Bank limits of deviation.

Regulation of powers over the Hornsea Four Order land

4.—(1) The undertaker may not exercise the powers under any of the articles of the Order specified in sub-paragraph (2) over or in respect of the Dogger Bank limits of deviation otherwise than with the prior written consent of Dogger Bank.

(2) The articles referred to in sub-paragraph (1) are—

- (a) article 8 (street works);
- (b) article 10 (temporary stopping up of streets and public rights of way);
- (c) article 11 (stopping up and diversion of public rights of way and access land);

- (d) article 12 (access to works);
- (e) article 14 (power to alter layout etc. of streets);
- (f) article 15 (discharge of water);
- (g) article 17 (authority to survey and investigate the land onshore);
- (h) article 18 (compulsory acquisition of land);
- (i) article 19 (compulsory acquisition of land: minerals)
- (j) article 21 (compulsory acquisition of rights);
- (k) article 22 (private rights);
- (l) article 24 (statutory authority to override easements and other rights);
- (m) article 25 (acquisition of subsoil only);
- (n) article 27 (rights under or over streets);
- (o) article 28 (temporary use of land for carrying out authorised project);
- (p) article 29 (temporary use of land for maintaining authorised development);
- (q) article 31 (statutory undertakers);
- (r) article 36 (felling or lopping of trees and removal of hedgerows); and
- (s) article 37 (trees subject to tree preservation orders).

(3) In the event that Dogger Bank withholds its consent pursuant to sub-paragraph (1) it will notify the undertaker in writing of the reasons for withholding such consent and (if applicable) the time period during which such consent will be withheld.

Co-operation during construction

5. The undertaker may not acquire any land interest or override any easement or other interest of Dogger Bank within the Dogger Bank limits of deviation without first obtaining the written consent of Dogger Bank.

6.—(1) Wherever in this Part of this Schedule provision is made with respect to the approval or consent of Dogger Bank, that approval or consent shall be in writing (and subject to such reasonable terms and conditions as Dogger Bank may require), but shall not be unreasonably withheld.

(2) In the event that Dogger Bank does not respond in writing to a request for approval or consent within 28 days of receipt of such a request, Dogger Bank is deemed to have given its consent (without any terms or conditions).

7. Insofar as the construction of the Hornsea Four authorised development is or may be undertaken concurrently with the Dogger Bank authorised development, the undertaker shall—

- (a) co-operate with Dogger Bank with a view to ensuring—
 - (i) the co-ordination of construction programming and the carrying out of works; and
 - (ii) that access for the purposes of constructing the respective authorised developments is maintained for the undertaker and Dogger Bank and their respective contractors.
- (b) use reasonable endeavours to avoid any conflict arising between the carrying out of the respective authorised developments.

8. Insofar as the construction of the Hornsea Four authorised development gives rise to the need to modify any scheme secured by a requirement contained in Part 3 of Schedule 1 to the Dogger Bank Order, the undertaker shall provide such assistance as is reasonably necessary to support Dogger Bank in pursuing any such modification.

Protection of Dogger Bank

9.—(1) Not less than 56 days before the commencement of any specified works the undertaker must submit to Dogger Bank a plan and, if reasonably required by Dogger Bank, a ground monitoring scheme in respect of those works.

(2) The plan to be submitted to Dogger Bank under sub-paragraph (1) must include a method statement and describe—

- (a) the exact position of the works;
- (b) the level at which these are proposed to be constructed or renewed;
- (c) the manner of their construction or renewal including details of excavation, positioning of plant etc.;
- (d) the position of all Dogger Bank authorised development;
- (e) by way of detailed drawings, every alteration proposed to be made to or close to any of the Dogger Bank authorised development; and
- (f) any intended maintenance regimes.

(3) The undertaker must not commence any works to which sub-paragraphs (1) and (2) apply until Dogger Bank has given written approval of the plan so submitted.

(4) Any approval of Dogger Bank required under sub-paragraph (3)—

- (a) may be given subject to reasonable conditions for any purpose mentioned in sub-paragraph (5) or (7); and
- (b) must not be unreasonably withheld.

(5) In relation to a work to which sub-paragraphs (1) and/or (2) apply, Dogger Bank may require such modifications to be made to the plans as may be reasonably necessary for the purpose of securing the Dogger Bank authorised development against interference or risk of damage or for the provision of protective works or for the purpose of providing or securing proper and convenient means of access to any of the Dogger Bank authorised development.

(6) Works to which this paragraph applies must only be executed in accordance with the plan, submitted under sub-paragraphs (1) and (2) or as relevant sub-paragraph (5), as amended from time to time by agreement between the undertaker and Dogger Bank and in accordance with such reasonable requirements as may be made in accordance with sub-paragraphs (5) and/or (7) by Dogger Bank for the alteration or otherwise for the protection of the Dogger Bank authorised development, or for securing access to it, and Dogger Bank will be entitled to watch and inspect the execution of those works.

(7) Where Dogger Bank requires any protective works to be carried out by itself or by the undertaker (whether of a temporary or permanent nature) such protective works, inclusive of any measures or schemes required and approved as part of the plan approved pursuant to this paragraph, must be carried out to Dogger Bank's satisfaction prior to the commencement of any specified works for which protective works are required and Dogger Bank must give notice of its requirement for such protective works within 42 days of the date of submission of a plan pursuant to this paragraph (except in an emergency).

(8) Nothing in this paragraph shall preclude the undertaker from submitting at any time or from time to time, but in no case less than 56 days before commencing the execution of any specified works, a new plan, instead of the plan previously submitted, and having done so the provisions of this paragraph will apply to and in respect of the new plan.

(9) The undertaker will not be required to comply with sub-paragraph (1) where it needs to carry out emergency works as defined in the 1991 Act but in that case it must give to Dogger Bank notice as soon as is reasonably practicable and a plan of those works and must—

- (a) comply with sub-paragraphs (5), (6) and (7) insofar as is reasonably practicable in the circumstances; and
- (b) comply with sub-paragraph (10) at all times.

(10) As soon as reasonably practicable after any ground subsidence event attributable to the authorised development the undertaker shall implement an appropriate ground mitigation scheme save that Dogger Bank retains the right to carry out any further necessary protective works for the safeguarding of its apparatus and can recover any such costs in line with paragraph 10.

Expenses

10.—(1) Save where otherwise agreed in writing between Dogger Bank and the undertaker and subject to the following provisions of this paragraph, the undertaker must pay to Dogger Bank within 30 days of receipt of an itemised invoice or claim from Dogger Bank all charges, costs and expenses reasonably incurred by Dogger Bank in, or in connection with this Part of this Schedule including without limitation—

- (a) the carrying out of protective works, plus a capitalised sum to cover the cost of maintaining and renewing permanent protective works;
- (b) the survey of any land, apparatus or works, the inspection and monitoring of works or the installation or removal of any temporary works reasonably necessary in consequence of the execution of any such works referred to in this Part of this Schedule.

Indemnity

11.—(1) Subject to sub-paragraphs (2) and (3), if by reason or in consequence of the construction of any works authorised by this Part of this Schedule or in consequence of the construction, use, maintenance or failure of any of the onshore elements of the authorised development by or on behalf of the undertaker or in consequence of any act or default of the undertaker (or any person employed or authorised by him) in the course of carrying out the onshore elements of the authorised development (including without limitation works carried out by the undertaker under this Part of this Schedule or any subsidence resulting from any of these works), any damage is caused to any apparatus or property of Dogger Bank, or there is any interruption in any service provided, or in the supply of any goods, by Dogger Bank, or Dogger Bank becomes liable to pay any amount to any third party, the undertaker will—

- (a) bear and pay on demand accompanied by an invoice or claim from Dogger Bank the cost reasonably and properly incurred by Dogger Bank in making good such damage or restoring the supply; and
- (b) indemnify Dogger Bank for any other expenses, loss, demands, proceedings, damages, claims, penalty or costs incurred by or recovered from Dogger Bank, by reason or in consequence of any such damage or interruption or Dogger Bank becoming liable to any third party as aforesaid other than arising from any default by Dogger Bank.

(2) The fact that any act or thing may have been done by Dogger Bank on behalf of the undertaker or in accordance with a plan approved by Dogger Bank or in accordance with any requirement of Dogger Bank as a consequence of the onshore elements of the authorised development or under its supervision will not (unless sub-paragraph (3) applies), excuse the undertaker from liability under the provisions of this sub-paragraph (2) where the undertaker fails to carry out and execute the works properly with due care and attention and in a skilful and workman like manner or in a manner that does not accord with the approved plan or as otherwise agreed between the undertaker and Dogger Bank.

(3) Nothing in sub-paragraph (1) shall impose any liability on the undertaker in respect of any damage or interruption to the extent that it is attributable to the neglect or default of Dogger Bank, its officers, servants, contractors or agents.

(4) Dogger Bank must give the undertaker reasonable notice of any such claim or demand and no settlement, admission of liability or compromise or demand must be made, unless payment is required in connection with a statutory compensation scheme without first consulting the undertaker and considering its representations.

(5) Dogger Bank must use its reasonable endeavours to mitigate in whole or in part and to minimise any costs, expenses, loss, demands and penalties to which the indemnity under sub-paragraph (1) applies. If requested to do so by the undertaker, Dogger Bank must provide an

explanation of how the claim has been minimised. The undertaker is only liable under subparagraph (1) for claims reasonably incurred by Dogger Bank.

(6) The undertaker must not commence construction (and must not permit the commencement of such construction) of any specified works until Dogger Bank is satisfied acting reasonably (but subject to all necessary regulatory constraints) that the undertaker or its contractor has procured acceptable insurance (and provided evidence to Dogger Bank that it shall maintain such acceptable insurance for the construction period of the specified works from the proposed date of commencement of construction of the specified works) and Dogger Bank has confirmed the same in writing to the undertaker.

(7) In the event that the undertaker fails to comply with paragraph 11(5) of this Part of this Schedule, nothing in this Part of this Schedule shall prevent Dogger Bank from seeking injunctive relief (or any other equitable remedy) in any court of competent jurisdiction.

Arbitration

12.—(1) Any difference or dispute arising between the undertaker and Dogger Bank under this Part of this Schedule shall, unless otherwise agreed in writing between the undertaker and Dogger Bank, be referred to and settled in arbitration in accordance with the Rules at Schedule 14 of this Order, by a single arbitrator to be agreed upon by the parties within 14 days of receipt of the notice of arbitration, or if the parties fail to agree within the time period stipulated, to be appointed on application of either party (after giving written notice to the other) by the Secretary of State.

(2) Should the Secretary of State fail to appoint an arbitrator under paragraph (1) within 14 days of the application, the referring party may refer to the Centre of Effective Dispute Resolution for appointment of an arbitrator.

(3) Article 39 (arbitration) shall not apply to any difference or dispute under any provisions of the Part of this Schedule.

Access

13. If in consequence of any specified works approved in accordance with this Part or the powers granted under this Order the access to any apparatus is materially obstructed, the undertaker must provide such alternative means of access to such apparatus as will enable Dogger Bank to maintain or use the apparatus no less effectively than was possible before such obstruction.

PART 8

FOR THE PROTECTION OF CARBON STORAGE LICENSEE

Application

1. For the protection of the licensee from time to time of United Kingdom Carbon Dioxide Appraisal and Storage Licence CS001, unless otherwise provided for in this Schedule or otherwise agreed in writing between the undertaker and the licensee the provisions of this Part of this Schedule shall have effect for so long as the Licence shall remain in full force and effect.

2. In the event that—

- (a) the licence is terminated and no longer has effect;
- (b) the consents required to develop the NEP Project are not obtained within four months of the coming into force of this Order; or
- (c) the licensee has not undertaken and completed the evaluation and shared that with the undertaker,

the obligations on the undertaker in this Part of this Schedule shall no longer have effect.

Interpretation

3. In this Part of this Schedule—

“applicable laws” means applicable laws, rules, orders, guidelines and regulations, including without limitation, those relating to health, safety and the environment and logistics activities such as helicopter and vessel operations;

“BP Exploration Operating Company Limited” means BP Exploration Operating Company Limited, with Company Registration Number 00305943, whose registered office is at Chertsey Road, Sunbury On Thames, Middlesex TW16 7BP;

“Carbon Sentinel Limited” means Carbon Sentinel Limited, with Company Registration Number 08116471, whose registered office is at 1–3 Strand, London WC2N 5EH;

“coexistence and proximity agreement” means an agreement entered on reasonable terms between the undertaker and the licensee in respect of the undertaker’s works and licensee’s works to reconcile and protect the interests of the parties as are known at the time to secure the implementation of the undertaker’s works and the licensee’s works, taking account of the matters in paragraph 10;

“the Endurance protective provisions plan” means the plan entitled protective provisions plan and certified as the protective provisions plan for the purposes of this Part of this Schedule;

“evaluation” means a Value of Information study, including but not limited to—

- (a) comprehensive evaluation of different seismic acquisition and processing techniques and survey designs, using forward modelling to investigate the impact on imaging from seabed to Bunter, and the ability to monitor the spread of the CO₂ plume;
- (b) field trials investigating the sand waves on the seabed and an assessment of the potential for those to impact on the use of ocean bottom seismic acquisition systems to monitor the spread of the CO₂ plume;
- (c) investigation and assessment of the potential acoustic noise of an operating wind farm and the potential impact of that on the quality of seismic data recorded during 3D seismic surveys;
- (d) an evaluation of the financial feasibility of acquiring two baseline surveys, one with towed streamer and the other with ocean bottom seismic acquisition systems, with the objective of achieving the greatest flexibility for future CO₂ monitoring in the overlap zone;
- (e) field trials to determine the appropriate size of exclusion zone required in respect of the vessels deployed on the NEP Project.

“good carbon storage practice” means the maintenance of all apparatus and appliances in good repair and condition and the execution of all operations in or in connection with the area subject to the licence in a proper and workmanlike manner in accordance with methods and practice customarily used in good industry practice (as defined in the licence) and taking all steps practicable in order to prevent damage to adjoining strata;

“good offshore wind farm construction practice” means the application of those methods and practices customarily used in the construction of wind farms in the United Kingdom continental shelf with that degree of diligence and prudence reasonably and ordinarily exercised by experienced operators and contractors engaged in the United Kingdom continental shelf in a similar activity under similar circumstances and conditions;

“interface agreement” means the agreement dated 14 February 2013 between (1) The Crown Estate Commissioners (2) Carbon Sentinel Limited and (3) Smart Wind Limited, as varied and adhered to by an agreement dated 12 September 2016 between (1) The Crown Estate Commissioners (2) Smart Wind Limited (3) Carbon Sentinel Limited and (4) the Undertaker and a Deed of Covenant and Adherence dated 10 February 2021 between (1) The Crown Estate Commissioners (2) the Undertaker (3) Smart Wind Limited (4) Carbon Sentinel Limited and (5) BP Exploration Operating Company Limited, or such other agreement as may be entered into by the parties in substitution for those agreements;

“licence” means United Kingdom Carbon Dioxide Appraisal and Storage Licence CS001;

“licensee” means the licensee from time to time of the licence (or any one of them);

“licensee’s works” means the installation, operation, monitoring and decommissioning of the NEP Project in the overlap zone;

“monitoring” means the monitoring of the licensee’s works within the overlap zone, including repeatable 3D seismic surveying undertaken over periods of up to 5 years, known as 4D monitoring;

“NEP Project” means the Northern Endurance Partnership project comprising an offshore transportation and geological storage facility which is, in part, proposed to be situated in the overlap zone and owned, occupied or maintained by or on behalf of the licensee, and authorised by the licence;

“overlap zone” means the area of seabed with the coordinates below and shown shaded orange on the Endurance protective provisions plan;

<i>Polygon Vertex</i>	<i>Longitude</i>	<i>Latitude</i>
1	1° 0' 34.075" E	54° 8' 51.929" N
2	1° 0' 43.850" E	54° 9' 13.497" N
3	0° 58' 21.782" E	54° 10' 49.480" N
4	0° 58' 31.095" E	54° 12' 37.143" N
5	1° 12' 18.263" E	54° 12' 17.413" N
6	1° 15' 35.528" E	54° 10' 48.297" N
7	1° 13' 54.364" E	54° 9' 52.770" N
8	1° 11' 0.989" E	54° 8' 17.458" N

“plan of the licensee’s works” means an exploration and development programme, method and details and location of licensee’s works and minimum requirements known at that time in accordance with good carbon storage practice and applicable laws to enable the licensee to, as applicable, explore, appraise, develop and/or decommission carbon dioxide storage as permitted by the licence;

“plan of the undertaker’s works” means a construction programme, method and details of the proposed location of the undertaker’s works and minimum requirements known at that time such as safety in accordance with good offshore wind farm construction practice and applicable laws to enable the undertaker to construct and operate the undertaker’s works;

“Relevant Activities” means all development activity relating to the carrying on of the undertaker’s and licensee’s businesses within, or adjacent to the overlap zone, including (but not limited to) the preparation of development proposals, the submission of applications for statutory consents associated with those proposals and consultation in respect thereof;

“Smart Wind Limited” means Smart Wind Limited, with Company Registration Number 07107382, whose registered office is at 5 Howick Place, London, England SW1P 1WG;

“The Crown Estate Commissioners” means The Crown Estate Commissioners on behalf of Her Majesty the Queen, acting in exercise of the powers of the Crown Estate Act 1961(a); and

“undertaker’s works” means the authorised development permitted by this order within the overlap zone, or to be installed within the overlap zone.

Coexistence and Proximity Agreement

4. Save as provided for in paragraphs 9, 11 and 13 no part of the undertaker’s works shall commence until in respect of the overlap zone, one of the following applies—

- (a) one or more coexistence and proximity agreement(s) has been concluded between the undertaker and the licensee in respect of the undertaker’s works and the licensee’s works;

(a) 1961 c.55.

- (b) the undertaker and the licensee shall have agreed in writing that no coexistence and proximity agreement is required in respect of the undertaker's works and the licensee's works; or
- (c) the Secretary of State has determined that a coexistence and proximity agreement is not required.

5. Within four months of the coming into force of this Order (or such other timescale as may be agreed between the undertaker and the licensee) the undertaker must commence preparation of a coexistence and proximity agreement by serving notice on the licensee including a plan of the undertaker's works along with a request for the licensee to produce a plan of the licensee's works.

6. In response to the notice the licensee shall produce a plan of the licensee's works within 28 days of service of the notice.

7. Preparation of a coexistence and proximity agreement must be concluded within 3 months of the date for production of the plan of the licensee's works under paragraph 6 above unless otherwise agreed in writing between the undertaker and the licensee.

8. If either party ("the notifying party") considers that the plan of the works of the other party ("the receiving party") produced pursuant to paragraph 5 or 6 above (as relevant) provides insufficient detail of—

- (a) in respect of the plan of the licensee's works—
 - (i) the consents required to develop the NEP Project;
 - (ii) the level of brine release;
 - (iii) the nature and location of the licensee's works;
 - (iv) any area of sea and/or airspace required for the licensee's works; and/or
 - (v) any monitoring required for the licensee's works;
- (b) in respect of the plan of the undertaker's works—
 - (i) the nature and location of the undertaker's works;
 - (ii) any area of sea and/or airspace required for the undertaker's works; and/or
 - (iii) any maintenance required for the undertaker's works,

in each case having been minimised to avoid adverse effects on the programming siting design construction or operation of the other party's works then the notifying party must notify the receiving party of the additional detail required whereupon the receiving party must provide all such additional detail to the notifying party within 28 days of such notification.

9. Subject to paragraph 13 below, paragraph 4 shall not apply if the plan of the licensee's works or additional detail provided pursuant to paragraph 8 above provides insufficient detail for the purposes set out in paragraph 4 above. In the event of any dispute on the sufficiency of the detail provided by the licensee pursuant to paragraph 8 then paragraph 11 shall apply to that dispute.

10. The coexistence and proximity agreement must be based on the plan of the licensee's works and the plan of the undertaker's works and must take account of—

- (a) the nature and location of each party's works on any plan of each party's works as known at that time;
- (b) the location and extent of sea and/or airspace required for each party's works (including all applicable exclusive zones) as known at that time and a minimum distance between each wind turbine generator of 2,000 metres in all directions measured from the centre point of the wind turbine generator;
- (c) all such evidence as is available at the time to support the existence of a prospect for the storage of carbon dioxide (with a view to its permanent disposal) in the area subject to the licence in respect of the licensee's works;

- (d) the objectively assessed ability of the licensee to reduce or remove its sea and/or airspace area requirement under (b) above in light of evidence at (c) above, whether with immediate effect or at a specified later date;
- (e) the objectively assessed ability of the undertaker to reduce or remove its sea and/or airspace area requirement under (b) above;
- (f) the date by which the licensee will seek to commence operation, or at which works of appraisal will cease, as known at that time;
- (g) the siting and design of the undertaker's works on any plan of the undertaker's works as known at that time;
- (h) the minimum feasible exclusive zones, buffer zones or safety zones required for safe construction and operation between the undertaker's works and the licensee's works and compliant with the relevant law and guidance in force at the time of undertaking those works;
- (i) protocols protective of navigation communication and use of the sea or air by third parties;
- (j) possible future transfer of the benefit of the Order or of the licence;
- (k) the national policy requirements for co-existence and the ongoing commercial viability of the authorised development permitted under this Order and the NEP Project;
- (l) the means and programme of access by sea to the undertaker's works and the licensee's works; and
- (m) an allocation between the undertaker and/or the licensee of the cost of monitoring based on an objective and independently verified assessment of the difference in cost between monitoring undertaken with and without the authorised development in the overlap zone.

11. If there is a dispute pursuant to paragraph 9, or if no coexistence and proximity agreement is concluded, or the parties shall not have agreed whether a crossing and proximity agreement is required pursuant to paragraph 4(b) within the period specified in paragraph 7, the outstanding matters in dispute must be determined by the Secretary of State following the process in article 39 (arbitration) of this Order as modified by paragraph 11. The undertaker's and the licensee's works must not commence until the determination of the Secretary of State has been made and must only be implemented in accordance with that determination which is final and binding on the parties (save for manifest or legal error)—

- (a) the arbitration shall be conducted by a sole arbitrator appointed by the Secretary of State;
- (b) the Secretary of State must consult the parties on the candidates for the role of arbitrator;
- (c) the Secretary of State must appoint an arbitrator within 14 days of the delivery of a notice of arbitration;
- (d) unless otherwise agreed between the Secretary of State, the undertaker and the licensee, the arbitrator shall be a person (including one who has retired) with not less than fifteen years' aviation, radar or shipping and marine navigation experience (as applicable) associated with a combination of offshore oil and gas development and offshore wind farm development or as a lawyer or other professional advisor serving those industries and having that experience;
- (e) the arbitrator should make a recommendation to the Secretary of State as to the determination of the matters in dispute within 1 month of appointment;
- (f) the Secretary of State must determine the arbitration within 1 month of receiving the recommendation of the arbitrator; and
- (g) when determining the arbitration the Secretary of State must—
 - (i) have regard to the recommendation of the arbitrator, but may reach an alternative view; and
 - (ii) give reasons for the determination.

Provision of information

12. Without prejudice to any other rights or obligations under this Part of this Schedule the licensee and the undertaker shall from time to time keep each other informed of relevant activities such that the licensee and the undertaker may seek to agree solutions to allow the undertaker's works and the licensee's works to successfully co-exist as far as reasonably practicable.

Interface agreement

13. Nothing in this Part of the Schedule shall affect any rights or obligations of the licensee or the undertaker under the terms of the interface agreement, and should a conflict arise between the terms of these protective provisions and the terms of the interface agreement, the interface agreement shall prevail.

PART 9

FOR THE PROTECTION OF NEO ENERGY (SNS) LIMITED

Application

1. For the protection of the licensee from time to time of United Kingdom Petroleum Production Licence P.456 Block 48/2a, unless otherwise agreed in writing between the undertaker and the licensee the provisions of this Part of this Schedule shall have effect for so long as the licence shall remain in full force and effect.

2. In the event that the licence is terminated and no longer has effect, the obligations on the undertaker in this Schedule shall no longer have effect in so far as they relate to the licensee's works under the terminated licence(s).

Interpretation

3. In this Part of this Schedule—

“licence” means United Kingdom Petroleum Production Licence P.456 Block 48/2a;

“licensee” means the licensee from time to time of the licence;

“ministerial statement” means the written statement given by the Secretary of State for Energy and Climate Change to the UK Parliament regarding Crown Estate Leases for Offshore Renewables Projects on 12 July 2011, or any similar supplementary or replacement policy;

“the NEO Protective Provisions Plan” means the plan entitled NEO Protective Provisions Plan and certified as the NEO Protective Provisions Plan for the purposes of this Part of this Schedule;

“Restricted Area” means the spherical area of seabed having a radius of 2.7 nautical miles from UTM 383,268.00 East, UTM 5,981,086.00 North (International Spheroid, European Datum 1950, Zone 31, Central Meridian 3 degrees East) that point being the centre of the existing Babbage platform in Licence P.456 Block 48/2a operated by the Licensee shown delineated green on the NEO Protective Provisions Plan; and

“relevant activities” means all development activity relating to the carrying on of the undertaker's and licensee's businesses within, or adjacent to the restricted area, including (but not limited to) the preparation of development proposals, the submission of applications for statutory consents associated with those proposals and consultation in respect thereof, the acquisition of or application for new licence oil or gas blocks.

Restriction on authorised development

4. No wind turbine generator shall be erected in the restricted area, unless otherwise agreed in writing between the licensee and the undertaker.

Provision of information

5. Without prejudice to any other rights or obligations under this Part of this Schedule the licensee and the undertaker shall from time to time keep each other informed of relevant activities such that the licensee and the undertaker may seek to agree solutions to allow those activities to successfully co-exist as far as reasonably practicable or if later until completion of activities required under any statutory decommissioning plan required under the Petroleum Act 1998 in relation to the licence and taking place within the areas subject to the licence.

Compensation

6. Nothing in this Part of this Schedule shall affect any rights or obligations or assessment of compensation in accordance with the ministerial statement and the associated guidance.

PART 10

FOR THE PROTECTION OF PERENCO UK LIMITED

Application

1. For the protection of the licensee from time to time of United Kingdom Petroleum Production Licence P.380, unless otherwise agreed in writing between the undertaker and the licensee the provisions of this Part of this Schedule shall have effect for so long as the licence shall remain in full force and effect.

2. In the event that the licence is terminated and no longer has effect, the obligations on the undertaker in this Schedule shall no longer have effect insofar as they relate to the licensee's works under the terminated licence.

Interpretation

3. In this Part of this Schedule—

“licence” means United Kingdom Petroleum Production Licence P.380;

“licensee” means the licensee from time to time of the licence;

“ministerial statement” means the written statement given by the Secretary of State for Energy and Climate Change to the UK Parliament regarding Crown estate Leases for Offshore Renewables Projects on 12 July 2011, or any similar supplementary or replacement policy;

“the Perenco protective provisions plan” means the plan entitled Perenco protective provisions plan and certified as the Perenco protective provisions plan for the purposes of this Part of this Schedule;

“restricted area” means the spherical areas of seabed having a radius of 2.7 nautical miles from:

- (a) position 54 degrees 01 minutes 53.0 seconds North, 01 degrees 06 minutes 08.0 seconds East, (UTM coordinates E375 697.1 N5988 809.0), that point being the centre of the existing Ravenspurn North CC platform; and
- (b) position 54 degrees 03 minutes 00.0 seconds North, 01 degrees 02 minutes 00.0 seconds East, (UTM coordinates E371 330.0 N5991 530.0), that point being the centre of the existing Ravenspurn ST2 platform

in licence P.380 Block 43/26a operated by the licensee shown on the Perenco protective provisions plan;

“relevant activities” means all development activity relating to the carrying on of the undertaker's and licensee's businesses within or adjacent to the restricted area, including (but not limited to) the preparation of development proposals, the submission of applications for

statutory consents associated with those proposals and consultation in respect thereof, the acquisition of or application for new licence oil or gas blocks.

Restriction on authorised development

4. No wind turbine generator shall be erected in the restricted area unless otherwise agreed in writing between the licensee and the undertaker.

Provision of information

5. Without prejudice to any other rights or obligations under this Part of this Schedule the licensee and the undertaker shall from time to time keep each other informed of relevant activities such that the licensee and the undertaker may seek to agree solutions to allow those activities to successfully co-exist as far as reasonably practicable or if later until completion of activities required under any statutory decommissioning plan required under the Petroleum Act 1998 in relation to the licence and taking place within the areas subject to the licence.

Compensation

6. Nothing in this Part of this Schedule shall affect any rights or obligations or assessment of compensation in accordance with the ministerial statement and the guidance (as applicable). #

PART 11

FOR THE PROTECTION OF NORTHERN POWERGRID (YORKSHIRE) PLC

Application

1. For the protection of Northern Powergrid referred to in this Part of this Schedule the following provisions must, unless otherwise agreed in writing between the undertaker and the affected undertaking concerned, have effect.

2. In this Part of this Schedule—

“alternative apparatus” means alternative apparatus adequate to enable Northern Powergrid to fulfil its statutory functions in a manner no less efficient than previously;

“apparatus” means electric lines or electrical plant (as defined in the 1989 Act), belonging to or maintained by Northern Powergrid;

“functions” includes powers and duties;

“in” in a context referring to apparatus or alternative apparatus in land includes a reference to apparatus or alternative apparatus under, over or upon land; and

“Northern Powergrid” means Northern Powergrid (Yorkshire) PLC (Company Number 04112320) whose registered address is Lloyds Court, 78 Grey Street, Newcastle upon Tyne, NE1 6AF.

Precedence of the 1991 Act in respect of apparatus in the streets

3. This Part of this Schedule does not apply to apparatus in respect of which the relations between the undertaker and the Northern Powergrid are regulated by the provisions of Part 3 of the 1991 Act.

No acquisition etc. except by agreement

4.—(1) Regardless of any provision in this Order or anything shown on the land plan or contained in the book of reference, the undertaker shall not acquire any apparatus or override any easement or other interest of Northern Powergrid or acquire any land or other interest of Northern

Powergrid or create any new rights over the same otherwise than by agreement of the relevant Northern Powergrid such agreement not to be unreasonably withheld or delayed (having regard to Northern Powergrid's existing and future requirements for such land or interests).

(2) Regardless of any provision in this Order or anything shown on the land plans or contained in the book of reference, the undertaker shall not interfere with any communications cables or equipment used by Northern Powergrid in relation to its apparatus or acquire or interfere with any rights or interests supporting the use, maintenance or renewal of such equipment otherwise than by agreement of Northern Powergrid (such agreement not to be unreasonably withheld or delayed).

Removal of apparatus

5.—(1) If, in the exercise of the powers conferred by this Order, the undertaker acquires any interest in any land in which any apparatus is placed, that apparatus must not be removed under this Part of this Schedule and any right of Northern Powergrid to maintain that apparatus in that land must not be extinguished until alternative apparatus has been constructed and is in operation to the reasonable satisfaction of Northern Powergrid.

(2) If, for the purpose of executing any works in, on or under any land purchased, held, or used under this Order, the undertaker requires the removal of any apparatus placed in that land, it must give to Northern Powergrid 56 days advance written notice of that requirement, together with a plan and section of the work proposed, and of the proposed position of the alternative apparatus to be provided or constructed and in that case (or if in consequence of the exercise of any of the powers conferred by this Order Northern Powergrid reasonably needs to remove any of its apparatus) the undertaker must, subject to sub-paragraph (3), afford to Northern Powergrid the necessary facilities and rights for the construction of alternative apparatus in other land of the undertaker and subsequently for the maintenance of that apparatus.

(3) If alternative apparatus or any part of such apparatus is to be constructed elsewhere than in other land of the undertaker, or the undertaker is unable to afford such facilities and rights as are mentioned in sub-paragraph (2), in the land in which the alternative apparatus or part of such apparatus is to be constructed—

- (a) the undertaker must in the first instance use reasonable endeavors to acquire all necessary land interests or rights as Northern Powergrid may reasonably require for the relocation and construction of alternative apparatus and must use reasonable endeavours to procure all necessary rights to access and maintain Northern Powergrid's apparatus and alternative apparatus thereafter the terms of such access and maintenance to be agreed by Northern Powergrid (acting reasonably); and
- (b) in the event the undertaker is not able to procure the necessary land interests or rights referred to in sub-paragraph (3)(i) Northern Powergrid must, on receipt of a written notice to that effect from the undertaker, as soon as reasonably possible use reasonable endeavours to obtain the necessary facilities and rights in the land in which the alternative apparatus is to be constructed save that this obligation shall not extend to the requirement for Northern Powergrid to use its compulsory purchase powers to this end unless it elects to do so.

(4) Any alternative apparatus to be constructed in land of the undertaker under this Part of this Schedule must be constructed in such manner and in such line or situation as may be agreed between Northern Powergrid and the undertaker or in default of agreement settled by arbitration in accordance with article 39 (arbitration).

(5) Northern Powergrid must, after the alternative apparatus to be provided or constructed has been agreed or settled by arbitration in accordance with article 39 (arbitration) and after the grant to Northern Powergrid of any such facilities and rights as are referred to in sub-paragraph (2) or (3), proceed without unnecessary delay to construct and bring into operation the alternative apparatus and subsequently to remove any apparatus required by the undertaker to be removed under the provisions of this Part of this Schedule.

Facilities and rights for alternative apparatus

6.—(1) Where, in accordance with the provisions of this Part of this Schedule, the undertaker affords to Northern Powergrid facilities and rights for the construction and maintenance in land of the undertaker of alternative apparatus in substitution for apparatus to be removed, those facilities and rights must be granted upon such terms and conditions as may be agreed between the undertaker and Northern Powergrid or in default of agreement settled by arbitration in accordance with article 39 (arbitration).

(2) If the facilities and rights to be afforded by the undertaker in respect of any alternative apparatus, and the terms and conditions subject to which those facilities and rights are to be granted, are in the opinion of the arbitrator less favourable on the whole to Northern Powergrid than the facilities and rights enjoyed by it in respect of the apparatus to be removed and the terms and conditions to which those facilities and rights are subject, the arbitrator must make such provision for the payment of compensation by the undertaker to Northern Powergrid as appears to the arbitrator to be reasonable having regard to all the circumstances of the particular case.

Retained apparatus

7.—(1) Not less than 56 days before starting the execution of any works in, on or under any land purchased, held, appropriated or used under this Order that are within 15 metres of, or will or may affect, any apparatus the removal of which has not been required by the undertaker under paragraph 5, the undertaker must submit to Northern Powergrid a plan, section and description of the works to be executed.

(2) Those works must be executed only in accordance with the plan, section and description submitted under sub-paragraph (1) and in accordance with such reasonable requirements as may be made in accordance with sub-paragraph (3) by Northern Powergrid for the alteration or otherwise for the protection of the apparatus, or for securing access to it, and Northern Powergrid is entitled to watch and inspect the execution of those works.

(3) Any requirements made by Northern Powergrid under sub-paragraph (2) must be made within a period of 49 days beginning with the date on which a plan, section and description under sub-paragraph (1) are submitted to it.

(4) If Northern Powergrid in accordance with sub-paragraph (2) and in consequence of the works proposed by the undertaker, reasonably requires the removal of any apparatus and gives written notice to the undertaker of that requirement, paragraphs 1 to 6 apply as if the removal of the apparatus had been required by the undertaker under paragraph 5.

(5) Nothing in this paragraph precludes the undertaker from submitting at any time or from time to time, but in no case less than 35 days before commencing the execution of any works, a new plan, section and description instead of the plan, section and description previously submitted, and having done so the provisions of this paragraph apply to and in respect of the new plan, section and description.

(6) The undertaker is not required to comply with sub-paragraph (1) in a case of emergency but in that case it must give to Northern Powergrid notice as soon as is reasonably practicable and a plan, section and description of those works as soon as reasonably practicable subsequently and must comply with sub-paragraph (2) in so far as is reasonably practicable in the circumstances.

8.—(1) Save where otherwise agreed in writing between Northern Powergrid and the undertaker and subject to the following provisions of this paragraph, the undertaker must repay to Northern Powergrid within 30 days of receipt of an itemised invoice or claim all charges costs and expenses reasonably incurred by Northern Powergrid in, or in connection with, the inspection, removal, relaying or replacing, alteration or protection of any apparatus or the construction of any new apparatus which may be required in consequence of the execution of any such works as authorised by this Order including without limitation—

- (a) any costs reasonably incurred or compensation properly paid in connection with the acquisition of rights or the exercise of statutory powers for such apparatus including without limitation in the event that Northern Powergrid elects to use compulsory purchase

powers to acquire any necessary rights under paragraph 7(3) all costs incurred as a result of such action;

- (b) in connection with the cost of the carrying out of any diversion work or the provision of any alternative apparatus;
- (c) the cutting off of any apparatus from any other apparatus or the making safe of redundant apparatus;
- (d) the approval of plans;
- (e) the carrying out of protective works, plus a capitalised sum to cover the cost of maintaining and renewing permanent protective works;
- (f) the survey of any land, apparatus or works, the inspection and monitoring of works or the installation or removal of any temporary works reasonably necessary in consequence of the execution of any such works referred to in this Schedule.

(2) If in accordance with the provisions of this Part of this Schedule—

- (a) apparatus of better type, of greater capacity or of greater dimensions is placed in substitution for existing apparatus of worse type, of smaller capacity or of smaller dimensions; or
- (b) apparatus (whether existing apparatus or apparatus substituted for existing apparatus) is placed at a depth greater than the depth at which the existing apparatus was,

and the placing of apparatus of that type or capacity or of those dimensions or the placing of apparatus at that depth, as the case may be, is not agreed by the undertaker or, in default of agreement, is not determined by arbitration in accordance with article 39 (arbitration) to be necessary, then, if such placing involves cost in the construction of works under this Part of this Schedule exceeding that which would have been involved if the apparatus placed had been of the existing type, capacity or dimensions, or at the existing depth, as the case may be, the amount which apart from this sub-paragraph would be payable to Northern Powergrid by virtue of sub-paragraph (1) must be reduced by the amount of that excess save where it is not possible in the circumstances to obtain the existing type of operations, capacity, dimensions or place at the existing depth in which case full costs shall be borne by the undertaker.

(3) For the purposes of sub-paragraph (2)—

- (a) an extension of apparatus to a length greater than the length of existing apparatus is not to be treated as a placing of apparatus of greater dimensions than those of the existing apparatus; and
- (b) where the provision of a joint in a cable is agreed, or is determined to be necessary, the consequential provision of a jointing chamber or of a manhole is to be treated as if it also had been agreed or had been so determined.

Expenses and costs

9.—(1) Subject to sub-paragraphs (2) to (5), if by reason or in consequence of the construction of any such works referred to in this Part of this Schedule, or in consequence of the construction, use, maintenance or failure of any of the authorised development by or on behalf of the undertaker or in consequence of any act or default of the undertaker (or any person employed or authorised by it) in the course of carrying out such works, including without limitation works carried out by the undertaker or Northern Powergrid under this Schedule or any subsidence resulting from any of these works, any damage is caused to any apparatus or alternative apparatus (other than apparatus the repair of which is not reasonably necessary in view of its intended removal for the purposes of those works) or property of Northern Powergrid, or there is any interruption in any service provided, or in the supply of any goods, by Northern Powergrid, or Northern Powergrid becomes liable to pay any amount to a third party the undertaker must—

- (a) bear and pay the cost reasonably incurred by Northern Powergrid in making good such damage or restoring the supply; and
- (b) indemnify Northern Powergrid for any other expenses, loss, demands, proceedings, damages, claims, penalty or costs incurred by or recovered from Northern Powergrid, by

reason or in consequence of any such damage or interruption or Northern Powergrid becoming liable to any third party.

(2) The fact that any act or thing may have been done by Northern Powergrid on behalf of the undertaker or in accordance with a plan approved by Northern Powergrid or in accordance with any requirement of Northern Powergrid as a consequence of the authorised development or under its supervision will not (unless sub-paragraph (3) applies), excuse the undertaker from liability under the provisions of this sub-paragraph (2) where the undertaker fails to carry out and execute the works properly with due care and attention and in a skilful and workman like manner or in a manner that does not materially accord with the approved plan or as otherwise agreed between the undertaker and Northern Powergrid.

(3) Nothing in sub-paragraph (1) imposes any liability on the undertaker with respect to—

- (a) any damage or interruption to the extent that it is attributable to the act, neglect or default of Northern Powergrid, its officers, servants, contractors or agents; or
- (b) any authorised development and/or any other works authorised by this Part of this Schedule carried out by Northern Powergrid as an assignee, transferee or lessee of the undertaker with the benefit of the Order subject to the proviso that once such works become apparatus (“new apparatus”) any works yet to be executed by the undertaker and not falling within this paragraph 9(3)(b) will be subject to the full terms of this Part of this Schedule including this paragraph 9 in respect of such new apparatus.

(4) Northern Powergrid must give the undertaker reasonable notice of any such claim or demand and no settlement or compromise may be made without the consent of the undertaker which, if it withholds such consent, shall have the sole conduct of any settlement or compromise or of any proceedings necessary to resist the claim or demand.

(5) Northern Powergrid must use its reasonable endeavours to mitigate in whole or in part and to minimise any costs, expenses, loss, demands and penalties to which the indemnity under sub-paragraph (1) applies. If request to do so by the undertaker, Northern Powergrid must provide an explanation of how the claim has been minimised. The undertaker is only liable under sub-paragraph (1) for claim reasonably incurred by Northern Powergrid.

10. Nothing in this Part of this Schedule affects the provisions of any enactment or agreement regulating the relations between the undertaker and Northern Powergrid in respect of any apparatus laid or erected in land belonging to the undertaker on the date on which this Order is made.

Co-operation

11. Where in consequence of the proposed construction of any of the authorised development, the undertaker or Northern Powergrid requires the removal of apparatus under paragraph 5(2) or otherwise or Northern Powergrid makes requirements for the protection or alteration of apparatus under paragraph 7, the undertaker shall use its best endeavours to co-ordinate the execution of the works in the interests of safety and the need to ensure the safe and efficient operation of Northern Powergrid’s undertaking taking into account the undertaker’s desire for the efficient and economic execution of the authorised development and the undertaker and Northern Powergrid shall use best endeavours to co-operate with each other for those purposes.

Access

12. If in consequence of an agreement reached in accordance with paragraph 4(1) or the powers granted under this Order the access to any apparatus or alternative apparatus is materially obstructed, the undertaker shall provide such alternative means of access to such apparatus or alternative apparatus as will enable Northern Powergrid to maintain or use the said apparatus no less effectively than was possible before such obstruction.

Notices

13. The plans submitted to Northern Powergrid by the undertaker pursuant to this Part of the Schedule must be sent to Northern Powergrid at property@northernpowergrid.com or such other address as Northern Powergrid may from time to time appoint instead for that purpose and notify to the undertaker in writing.

PART 12

FOR THE PROTECTION OF BRIDGE PETROLEUM 2 LIMITED

Application

1. For the protection of the licensee from time to time of United Kingdom Petroleum Production Licence P.2426, unless otherwise provided for in this Schedule or otherwise agreed in writing between the licensee and the undertaker the provisions of this Part of this Schedule shall have effect for so long as the licence shall remain in full force and effect.

2. In the event that—

- (a) the licence is terminated and no longer has effect;
- (b) within four months of the coming into force of this Order, the licensee has not obtained the necessary consents;
- (c) the licensee fails to serve notice on the undertaker as required by paragraph 5,

the obligations on the undertaker in this Part of this Schedule shall no longer have effect.

Interpretation

3. In this Part of this Schedule—

“Bridge protected area plan” means the plan entitled Bridge Petroleum: Kumatage Protective Provisions and certified as the Bridge protected area plan for the purposes of this Part of this Schedule;

“emergency works” means works whose execution at the time when they are executed is required in order to put an end to, or to prevent the occurrence of, circumstances then existing or imminent (or which the person responsible for the works believes on reasonable grounds to be existing or imminent) which are likely to cause danger to persons, property or the environment;

“exclusion zones” means an area on, under or above the seabed within a distance of 500m of the outer edge of an installed platform or centre point of installed subsea infrastructure (excluding an installed pipeline) and an area of 200m either side of an installed pipeline, in each case forming part of the licensee’s works;

“licence” means United Kingdom Petroleum Production Licence P.2426;

“licensee” means the licensee from time to time of the licence;

“licensee’s works” means exploration, appraisal, development, production, maintenance, interventions and/or decommissioning activity in accordance with and pursuant to the licence;

“necessary consents” means regulatory approval from the North Sea Transition Agency (or any successor in function) and the Offshore Petroleum Regulator for Environment and Decommissioning (or any successor in function) for one or more appraisal well(s) and approval from the North Sea Transition Agency (or any successor in function) of a field development plan;

“pipeline route A” means the route coloured pale yellow on the Bridge protected area plan;

“pipeline route B” means the route coloured red on the Bridge protected area plan;

“primary lines of orientation” means the lines identified as the primary lines of orientation for wind turbine generators comprised in the authorised development running south east to north west on bearing 326.5 degrees as shown on the Bridge protected area plan;

“protected area” means the area of seabed with the coordinates below and shown shaded grey/blue on the Bridge protected area plan, excluding any relinquished area

<i>X_UTM31N</i>	<i>Y_UTM31N</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Lat_DMS</i>	<i>Long_DMS</i>
369758.7442	6001005.102	54.14062859	1.006235389	54° 8' 26.263" N	1° 0' 22.447" E
370895.6849	6000130.985	54.13306382	1.024002362	54° 7' 59.030" N	1° 1' 26.409" E
371000.6638	6000185.22	54.13357734	1.025584881	54° 8' 0.878" N	1° 1' 32.106" E
371114.236	6000217.83	54.13389873	1.027308113	54° 8' 2.035" N	1° 1' 38.309" E
371232.0093	6000227.549	54.13401555	1.029105395	54° 8' 2.456" N	1° 1' 44.779" E
371349.3879	6000214.002	54.13392326	1.030906567	54° 8' 2.124" N	1° 1' 51.264" E
371461.8379	6000177.714	54.13362543	1.032642027	54° 8' 1.052" N	1° 1' 57.511" E
371564.9957	6000120.091	54.13313363	1.03424441	54° 7' 59.281" N	1° 2' 3.280" E
371654.8603	6000043.37	54.13246692	1.035651552	54° 7' 56.881" N	1° 2' 8.346" E
371727.9464	5999950.524	54.13165119	1.03680887	54° 7' 53.944" N	1° 2' 12.512" E
371780.158	5999848.371	54.13074663	1.037650827	54° 7' 50.688" N	1° 2' 15.543" E
371811.9723	5999738.148	54.12976449	1.03818421	54° 7' 47.152" N	1° 2' 17.463" E
371822.2261	5999623.885	54.12874068	1.038389537	54° 7' 43.466" N	1° 2' 18.202" E
371810.5448	5999509.758	54.12771263	1.03825933	54° 7' 39.765" N	1° 2' 17.734" E
371777.3552	5999399.942	54.12671793	1.037798369	54° 7' 36.185" N	1° 2' 16.074" E
371723.8708	5999298.449	54.12579294	1.03702353	54° 7' 32.855" N	1° 2' 13.285" E
371652.0469	5999208.992	54.12497147	1.035963155	54° 7' 29.897" N	1° 2' 9.467" E
371564.5095	5999134.84	54.12428355	1.03465602	54° 7' 27.421" N	1° 2' 4.762" E
371707.0735	5999034.998	54.12342232	1.036878551	54° 7' 24.320" N	1° 2' 12.763" E
371814.9826	5998898.439	54.12222259	1.03858664	54° 7' 20.001" N	1° 2' 18.912" E
371879.1565	5998736.653	54.12078534	1.039636569	54° 7' 14.827" N	1° 2' 22.692" E
371894.1948	5998563.256	54.11923155	1.03994004	54° 7' 9.234" N	1° 2' 23.784" E
371869.3359	5998424.266	54.11797689	1.039618876	54° 7' 4.717"	1° 2' 22.628"

				N	E
371812.684	5998294.935	54.11680105	1.038807534	54° 7' 0.484" N	1° 2' 19.707" E
371727.3768	5998182.423	54.11576916	1.037550984	54° 6' 56.769" N	1° 2' 15.184" E
371618.1385	5998092.963	54.11493834	1.035918829	54° 6' 53.778" N	1° 2' 9.308" E
371517.1978	5998041.233	54.11444847	1.034397558	54° 6' 52.014" N	1° 2' 3.831" E
371408.3254	5998009.424	54.11413554	1.032746584	54° 6' 50.888" N	1° 1' 57.888" E
371295.412	5997998.673	54.11401073	1.031024889	54° 6' 50.439" N	1° 1' 51.690" E
371182.4928	5998009.363	54.1140785	1.029293977	54° 6' 50.683" N	1° 1' 45.458" E
371073.6033	5998041.114	54.11433642	1.027615684	54° 6' 51.611" N	1° 1' 39.416" E
370972.635	5998092.79	54.11477528	1.026049969	54° 6' 53.191" N	1° 1' 33.780" E
370883.1961	5998162.545	54.1153794	1.024652768	54° 6' 55.366" N	1° 1' 28.750" E
370808.4831	5998247.885	54.11612721	1.023474009	54° 6' 58.058" N	1° 1' 24.506" E
370748.8624	5998350.778	54.11703645	1.022518453	54° 7' 1.331" N	1° 1' 21.066" E
370710.7056	5998463.407	54.11803854	1.021886867	54° 7' 4.939" N	1° 1' 18.793" E
370695.5115	5998581.35	54.11909413	1.02160408	54° 7' 8.739" N	1° 1' 17.775" E
370703.8771	5998699.973	54.12016175	1.021681229	54° 7' 12.582" N	1° 1' 18.052" E
370735.4737	5998814.617	54.12119946	1.02211531	54° 7' 16.318" N	1° 1' 19.615" E
370789.0601	5998920.777	54.1221665	1.022889294	54° 7' 19.799" N	1° 1' 22.401" E
370862.5312	5999014.283	54.12302486	1.023972795	54° 7' 22.889" N	1° 1' 26.302" E
370953.001	5999091.462	54.12374082	1.02532326	54° 7' 25.467" N	1° 1' 31.164" E
370856.0517	5999152.369	54.12426358	1.023814676	54° 7' 27.349" N	1° 1' 25.733" E
370772.4368	5999230.583	54.12494512	1.022502564	54° 7' 29.802" N	1° 1' 21.009" E
370705.2009	5999323.255	54.12576063	1.021434697	54° 7' 32.738" N	1° 1' 17.165" E
370656.7919	5999427.012	54.12668043	1.02064996	54° 7' 36.050" N	1° 1' 14.340" E
369290.5479	5999425.493	54.12632131	0.999756873	54° 7' 34.757" N	0° 59' 59.125" E
369409.1471	5999825.625	54.12994553	1.00139754	54° 7' 47.804" N	1° 0' 5.031" E
370629.9711	5999826.982	54.13026636	1.02006844	54° 7'	1° 1' 12.246"

				48.959" N	E
369634.1373	6000584.701	54.13682085	1.004510756	54° 8' 12.555" N	1° 0' 16.239" E
369758.7442	6001005.102	54.14062859	1.006235389	54° 8' 26.263" N	1° 0' 22.447" E

“offshore wind infrastructure” means all infrastructure permitted by this Order excluding offshore wind activities and the overhanging of a wind turbine generator blade;

“offshore wind activities” means investigation survey or other activity relating to the evaluation of development construction operation and maintenance and/or decommissioning of the authorised development and shall include the use of a jack-up or other vessel;

“relinquished area” means any part of the protected area that is relinquished by the licensee pursuant to the licence or otherwise removed from the scope of the licence, but which shall not include the exclusion zones; and

“remaining overlap area” means the area of seabed with the coordinates below and shown cross-hatched on the Bridge protected area plan

<i>ETRS89_X</i>	<i>ETRS89_Y</i>	<i>Latitude</i>	<i>Longitude</i>	<i>DDLat</i>	<i>DDLlong</i>
369290.5479	5999425.493	54° 7' 34.757" N	0° 59' 59.125" E	54.12632131	0.999756873
370656.7919	5999427.012	54° 7' 36.050" N	1° 1' 14.340" E	54.12668043	1.02064996
370705.2009	5999323.255	54° 7' 32.738" N	1° 1' 17.165" E	54.12576063	1.021434697
370772.4368	5999230.583	54° 7' 29.802" N	1° 1' 21.009" E	54.12494512	1.022502564
370856.0517	5999152.369	54° 7' 27.349" N	1° 1' 25.733" E	54.12426358	1.023814676
370953.001	5999091.462	54° 7' 25.467" N	1° 1' 31.164" E	54.12374082	1.02532326
370862.5312	5999014.283	54° 7' 22.889" N	1° 1' 26.302" E	54.12302486	1.023972795
370789.0601	5998920.777	54° 7' 19.799" N	1° 1' 22.401" E	54.12216649	1.022889294
370735.4737	5998814.617	54° 7' 16.318" N	1° 1' 19.615" E	54.12119946	1.02211531
370703.8771	5998699.973	54° 7' 12.582" N	1° 1' 18.052" E	54.12016175	1.021681229
370695.5115	5998581.35	54° 7' 8.739" N	1° 1' 17.775" E	54.11909413	1.02160408
370710.7056	5998463.407	54° 7' 4.939" N	1° 1' 18.793" E	54.11803854	1.021886867
370748.8624	5998350.777	54° 7' 1.331" N	1° 1' 21.066" E	54.11703645	1.022518453
370808.4831	5998247.885	54° 6' 58.058" N	1° 1' 24.506" E	54.11612721	1.023474009
370883.1961	5998162.545	54° 6' 55.366" N	1° 1' 28.750" E	54.1153794	1.024652768
370972.635	5998092.79	54° 6' 53.191" N	1° 1' 33.780" E	54.11477528	1.026049969
371073.6033	5998041.114	54° 6' 51.611" N	1° 1' 39.416" E	54.11433642	1.027615684
371182.4928	5998009.363	54° 6'	1° 1' 45.458"	54.1140785	1.029293977

		50.683" N	E		
371295.412	5997998.672	54° 6' 50.439" N	1° 1' 51.690" E	54.11401073	1.031024889
371408.3254	5998009.424	54° 6' 50.888" N	1° 1' 57.888" E	54.11413554	1.032746584
371517.1978	5998041.233	54° 6' 52.014" N	1° 2' 3.831" E	54.11444847	1.034397558
371618.1385	5998092.963	54° 6' 53.778" N	1° 2' 9.308" E	54.11493834	1.035918829
371727.3768	5998182.423	54° 6' 56.769" N	1° 2' 15.184" E	54.11576916	1.037550984
371812.684	5998294.934	54° 7' 0.484" N	1° 2' 19.707" E	54.11680105	1.038807534
371869.3359	5998424.266	54° 7' 4.717" N	1° 2' 22.628" E	54.11797689	1.039618876
371894.1948	5998563.256	54° 7' 9.234" N	1° 2' 23.784" E	54.11923155	1.03994004
371879.1565	5998736.653	54° 7' 14.827" N	1° 2' 22.692" E	54.12078534	1.039636569
371814.9826	5998898.439	54° 7' 20.001" N	1° 2' 18.912" E	54.12222259	1.03858664
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371564.5095	5999134.84	54° 7' 27.421" N	1° 2' 4.762" E	54.12428355	1.03465602
371652.0469	5999208.992	54° 7' 29.897" N	1° 2' 9.467" E	54.12497147	1.035963155
371723.8708	5999298.449	54° 7' 32.855" N	1° 2' 13.285" E	54.12579294	1.03702353
371777.3552	5999399.942	54° 7' 36.185" N	1° 2' 16.074" E	54.12671793	1.037798369
371810.5448	5999509.758	54° 7' 39.765" N	1° 2' 17.734" E	54.12771263	1.03825933
371822.2261	5999623.885	54° 7' 43.466" N	1° 2' 18.202" E	54.12874068	1.038389537
371811.9723	5999738.148	54° 7' 47.152" N	1° 2' 17.463" E	54.12976449	1.03818421
371780.158	5999848.371	54° 7' 50.688" N	1° 2' 15.543" E	54.13074663	1.037650827
371727.9464	5999950.524	54° 7' 53.944" N	1° 2' 12.512" E	54.13165119	1.03680887
371654.8603	6000043.37	54° 7' 56.881" N	1° 2' 8.346" E	54.13246692	1.035651552
371564.9957	6000120.091	54° 7' 59.281" N	1° 2' 3.280" E	54.13313363	1.03424441
371461.8379	6000177.714	54° 8' 1.052" N	1° 1' 57.511" E	54.13362543	1.032642027
371349.3879	6000214.002	54° 8' 2.124" N	1° 1' 51.264" E	54.13392326	1.030906567
371232.0093	6000227.548	54° 8' 2.456" N	1° 1' 44.779" E	54.13401555	1.029105395
371114.236	6000217.83	54° 8' 2.035" N	1° 1' 38.309" E	54.13389873	1.027308113
371000.6638	6000185.22	54° 8' 0.878" N	1° 1' 32.106" E	54.13357734	1.025584881

		N	E		
370895.6849	6000130.985	54° 7' 59.030" N	1° 1' 26.409" E	54.13306382	1.024002362
369758.744	6001005.102	54° 8' 26.263" N	1° 0' 22.447" E	54.14062859	1.006235386
370188.1134	6002453.716	54° 9' 13.497" N	1° 0' 43.850" E	54.15374908	1.012180474
369052.38	6003839.014	54° 9' 57.254" N	0° 59' 39.116" E	54.1659038	0.994198772
374775.9162	6003680.049	54° 9' 57.253" N	1° 4' 54.768" E	54.1659037	1.081880049
374549.6554	5995336.516	54° 5' 27.244" N	1° 4' 54.777" E	54.09090122	1.081882594
373037.8605	5995377.85	54° 5' 27.247" N	1° 3' 31.553" E	54.09090193	1.058764698
372386.8054	5996013.946	54° 5' 47.237" N	1° 2' 54.774" E	54.09645475	1.048548266
372395.3332	5996323.166	54° 5' 57.244" N	1° 2' 54.773" E	54.09923444	1.048548168
372060.5767	5996332.517	54° 5' 57.247" N	1° 2' 36.341" E	54.09923534	1.043428091
369201.7237	5999125.817	54° 7' 24.985" N	0° 59' 54.702" E	54.12360695	0.998528288
369409.1471	5999825.625	54° 7' 47.804" N	1° 0' 5.031" E	54.12994553	1.00139754
369634.1371	6000584.702	54° 8' 12.555" N	1° 0' 16.239" E	54.13682085	1.004510753
370629.9711	5999826.982	54° 7' 48.959" N	1° 1' 12.246" E	54.13026636	1.02006844

Protected area

4.—(1) Subject to paragraph 7, no offshore wind infrastructure shall be constructed within the protected area.

(2) The undertaker may perform offshore wind activities in the protected area provided that—

- (a) the undertaker provides advance written notice of its activities in the protected area as soon as reasonably practicable and in any event no later than six months prior to the scheduled commencement of such activities;
- (b) the undertaker's notice must describe the nature, extent, anticipated start date and duration of the activities;
- (c) following commencement of the offshore wind activities in the protected area, the undertaker must provide regular updates (no less frequently than every fourteen days) to the licensee throughout the duration of the offshore wind activities in the protected area as to their progress; and
- (d) within 24 hours of the completion of the offshore wind activities, the undertaker provides notice to the licensee that the activities have been completed and the protected area has been vacated.

(3) The requirement for advance notice in sub-paragraph (2)(a) above shall not apply to any offshore wind activities which are emergency works, in which case the undertaker must provide notice as soon as reasonably practicable after commencement of the activities.

(4) Following completion of the relevant offshore wind activities the undertaker shall use reasonable endeavours not to restrict, delay, hinder or prevent in any way the licensee's or its agents' ability to access safely the protected area and to carry out any drilling, development,

production or decommissioning activities that the licensee, acting as a reasonable and prudent operator deems necessary from time to time.

5. No later than four months after the coming into force of this Order, the licensee shall notify the undertaker of its proposed location of its pipeline, such location being either pipeline route A or pipeline route B. From the date the undertaker receives the licensee's notification, the protected area shall include either pipeline route A or pipeline route B (as elected by the licensee).

Line of orientation

6. The licensee shall not carry out, nor procure the carrying out of, the licensee's works in any way that would prevent the undertaker from constructing and maintaining the wind turbine generators comprised in the authorised development in a layout consistent with the primary lines of orientation.

Crossing and proximity

7. The undertaker and the licensee shall use reasonable endeavours to enter into a crossing and/or proximity agreement on standard UK oil and gas industry terms in relation to the licensee's works and the authorised development in relation to the protected area and the remaining overlap area, such agreement to be entered as soon as reasonably practicable after the coming into force of this Order.

PART 13

FOR THE PROTECTION OF HARBOUR ENERGY LIMITED, PERENCO UK LIMITED, PREMIER OIL E&P UK EU LIMITED, DANA PETROLEUM (E&P) LIMITED AND DANA PETROLEUM LIMITED

Application

1. For the protection of the licensee from time to time of United Kingdom Petroleum Production Licences P686 and P380, unless otherwise agreed in writing between the undertaker and the licensee the provisions of this Part of this Schedule shall have effect for so long as the licence shall remain in full force and effect.

Interpretation

2. In this Part of this Schedule—

“aviation access area” means the area coloured pink and annotated and shown as the aviation access area on the Johnston protective provisions plan, and within which the undertaker shall provide an aviation access corridor;

“aviation access corridor” means an 800m aviation access corridor of clear airspace measured tip to tip from any wind turbine generator, to the aviation corridor, notified by the undertaker to the licensee prior to the commencement of the undertaker's works;

“aviation corridor” means an 800m aviation corridor of clear airspace measured tip to tip from any wind turbine generator shown coloured blue and annotated and shown as the aviation corridor (along the route of the Johnston pipeline) on the Johnston protective provisions plan;

“block” means a block of the United Kingdom Continental Shelf designated as such on the map deposited at the principal office of the North Sea Transition Authority;

“coexistence and proximity agreement” means an agreement entered on reasonable terms between the undertaker and the licensee in respect of the undertaker's works and licensee's works to reconcile and protect the interests of the parties as are known at the time to secure the implementation of the undertaker's works and the licensee's works;

“licences” means United Kingdom Petroleum Production Licences P686 block 43/27a and P380 block 43/26a;

“licensee” means the licensee from time to time of the licence;

“licensee’s works” means the decommissioning of the Johnston Field in accordance with the Johnston Decommissioning Programme (Rev B01, March 2022) as approved by the Offshore Petroleum Regulator for Environment and Decommissioning and as amended from time to time, but excluding any post-decommissioning monitoring and evaluation;

“marine corridor” means a 1000m corridor measured from centre to centre from any wind turbine generator (along the route of the Johnston pipeline);

“ministerial statement” means the written statement given by the Secretary of State for Energy and Climate Change to the UK Parliament regarding Crown Estate Leases for Offshore Renewables Projects on 12 July 2011, or any similar supplementary or replacement policy;

“Johnston Assets” means any and all facilities and infrastructure owned, operated, leased and/or otherwise contracted to the licensee from time to time for the purposes of the licences including but not limited to one exploration well, six producer wells, four pipelines and 15 umbilicals located in the Johnston Field and shown on the Johnston protective provisions plan;

“Johnston Field” means the area to which the licensee’s rights granted by the licences relate, being at the date hereof, that area shown by the coordinates detailed on the Johnston protective provisions plan;

“the Johnston protective provisions plan” means the plan entitled Johnston protective provisions plan and certified as the Johnston protective provisions plan for the purposes of this Part of this Schedule;

“relevant activities” means all development activity relating to the carrying on of the undertaker’s and licensee’s businesses within, or adjacent to the aviation corridor or a WTG exclusion zone, including (but not limited to) the preparation of development proposals, the submission of applications for statutory consents associated with those proposals and consultation in respect thereof, the acquisition of or application for new licence oil or gas blocks;

“undertaker’s works” means the offshore works permitted by this Order;

“WTG exclusion zone” means an area of 900m radius of clear airspace measured from the centre of each of the Johnston production wellheads and coloured yellow and annotated and shown as a WTG exclusion zone on the Johnston protective provisions plan.

Restriction on authorised development

3. Prior to the completion of the licensee’s works, no wind turbine generator shall be erected in the marine corridor, the aviation corridor, the aviation access corridor or in any WTG exclusion zone, unless otherwise agreed in writing between the licensee and the undertaker.

4. In the event the licensee’s works commence prior to the undertaker’s works, the undertaker must not build, construct, erect or lay any temporary infrastructure and/or carry out any activities within the marine corridor, the aviation corridor, the aviation access corridor or in any WTG exclusion zone that would interfere with the licensee’s works causing a delay.

Coexistence and proximity agreement

5. If, at any time the undertaker plans to undertake the undertaker’s works and/or any other work which is within five hundred metres (500m) of the Johnston Assets, the undertaker shall notify the licensee and the undertaker and the licensee must, unless agreed otherwise, acting reasonably, agree and enter into a crossing and proximity agreement as soon as reasonably practicable.

Provision of information

6. Without prejudice to any other rights or obligations under this Part of this Schedule the licensee and the undertaker shall from time to time keep each other informed of relevant activities such that the licensee and the undertaker may seek to agree solutions to allow those activities to successfully co-exist as far as reasonably practicable until completion of activities required under any statutory decommissioning plan required under the Petroleum Act 1998 in relation to the licence and taking place within the areas subject to the licence.

Compensation

7. Nothing in this Part of this Schedule shall affect any rights or obligations or assessment of compensation in accordance with the ministerial statement and the associated guidance.

SCHEDULE 10 HEDGEROWS

PART 1 REMOVAL OF HEDGEROWS

<i>(1)</i> <i>Area</i>	<i>(2)</i> <i>Location of hedgerow</i>
East Riding of Yorkshire District	The hedgerow shown between points 1a and 1b on sheet 1 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 2a and 2b on sheet 1 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 3a and 3b on sheet 1 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 4a and 4b on sheets 1 and 2 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 5a and 5b on sheet 2 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 6a and 6b on sheets 2 and 3 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 7a and 7b on sheets 2 and 3 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 8a and 8b on sheet 3 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 10a and 10b on sheet 3 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 11a and 11b on sheets 3 and 4 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 12a and 12b on sheets 3 and 4 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 13a and 13b on sheet 4 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 14a and 14b on sheet 4 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 15a and 15b on sheet 5 of the tree preservation order and hedgerow plan

East Riding of Yorkshire District	The hedgerow shown between points 18a and 18b on sheet 6 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 19a and 19b on sheet 6 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 20a and 20b on sheet 6 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 20c and 20d on sheet 6 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 21a and 21b on sheet 6 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 22a and 22b on sheets 6 and 7 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 23a and 23b on sheet 7 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 24a and 24b on sheet 7 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 25a and 25b on sheet 7 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 26a and 26b on sheets 7 and 8 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 27a and 27b on sheets 7 and 8 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 28a and 28b on sheet 8 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 29a and 29b on sheet 8 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 30a and 30b on sheet 8 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 31a and 31b on sheets 8 and 9 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 32a and 32b on sheets 8 and 9 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 33a and 33b on sheets 8 and 9 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 33c and 33d on sheets 8 and 9 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 34a and

	34b on sheets 8 and 9 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 35a and 35b on sheet 9 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 36a and 36b on sheet 9 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 37a and 37b on sheet 9 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 38a and 38b on sheet 9 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 39a and 39b on sheet 10 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 40a and 40b on sheet 10 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 41a and 41b on sheet 10 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 42a and 42b on sheet 10 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 43a and 43b on sheet 11 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 43c and 43d on sheet 11 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 44a and 44b on sheets 11 and 12 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 45a and 45b on sheet 12 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 46a and 46b on sheet 12 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 47a and 47b on sheet 13 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 48a and 48b on sheet 13 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 49a and 49b on sheet 13 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 50a and 50b on sheet 14 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 51a and 51b on sheet 14 of the tree preservation order

	and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 52a and 52b on sheet 15 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 53a and 53b on sheet 15 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 54a and 54b on sheet 15 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 55a and 55b on sheet 15 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 56a and 56b on sheet 15 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 57a and 57b on sheet 15 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 58a and 58b on sheets 15 and 16 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 59a and 59b on sheets 15 and 16 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 60a and 60b on sheet 16 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 61a and 61b on sheet 16 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 62a and 62b on sheet 16 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 63a and 63b on sheet 16 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 64a and 64b on sheet 16 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 65a and 65b on sheet 16 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 66a and 66b on sheet 16 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 67a and 67b on sheet 16 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 73a and 73b on sheets 16 and 17 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown at point 73c on sheet 17 of the tree preservation order and hedgerow plan

East Riding of Yorkshire District	The hedgerow shown between points 74a and 74b on sheet 17 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 75a and 75b on sheet 17 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 76a and 76b on sheets 17 and 18 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 77a and 77b on sheet 18 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 78a and 78b on sheet 18 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 79a and 79b on sheets 18 and 19 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 80a and 80b on sheet 19 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 80c and 80d on sheet 19 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 81a and 81b on sheets 19 and 20 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 82a and 82b on sheet 20 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 83a and 83b on sheet 21 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 84a and 84b on sheet 21 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 85a and 85b on sheet 21 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 86a and 86b on sheet 21 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 87a and 87b on sheet 21 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 88a and 88b on sheet 21 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 129a and 129b on sheet 21 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 89a and 89b on sheet 22 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 90a and

	90b on sheet 22 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 91a and 91b on sheet 22 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 92a and 92b on sheets 22 and 23 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 93a and 93b on sheets 22 and 23 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 94a and 94b on sheet 23 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 94c and 94d on sheet 23 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 95a and 95b on sheet 23 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 96a and 96b on sheet 23 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 97a and 97b on sheet 23 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 98a and 98b on sheets 23 and 24 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 99a and 99b on sheets 23 and 24 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 100a and 100b on sheet 24 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 101a and 101b on sheet 24 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 101c and 101d on sheet 24 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 102a and 102b on sheet 24 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 105a and 105b on sheet 25 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 106a and 106b on sheet 25 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 107a and 107b on sheet 25 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 108a and 108b on sheets 25 and 26 of the tree

	preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 110a and 110b on sheets 25 and 26 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 111a and 111b on sheets 25 and 26 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 112a and 112b on sheets 25 and 26 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 114a and 114b on sheet 26 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 115a and 115b on sheet 26 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 116a and 116b on sheet 26 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 117a and 117b on sheet 26 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 118a and 118b on sheet 26 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 119a and 119b on sheets 26 and 28 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 120a and 120b on sheets 26 and 28 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 121a and 121b on sheet 28 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 121c and 121d on sheet 28 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 122a and 122b on sheet 28 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 123a and 123b on sheet 28 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 124a and 124b on sheets 27 and 28 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 125a and 125b on sheets 27 and 28 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 126a and 126b on sheets 26, 27 and 28 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 127a and 127b on sheets 26, 27 and 28 of the tree preservation order and hedgerow plan

East Riding of Yorkshire District	The hedgerow shown between points 128a and 128b on sheet 27 of the tree preservation order and hedgerow plan
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PART 2

REMOVAL OF IMPORTANT HEDGEROWS

<i>(1)</i> <i>Area</i>	<i>(2)</i> <i>Location of hedgerow</i>
East Riding of Yorkshire District	The hedgerow shown between points 9a and 9b on sheet 3 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 16a and 16b on sheet 5 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 17a and 17b on sheet 6 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 103a and 103b on sheet 24 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 104a and 104b on sheets 24 and 25 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 109a and 109b on sheets 25 and 26 of the tree preservation order and hedgerow plan
East Riding of Yorkshire District	The hedgerow shown between points 113a and 113b on sheets 25 and 26 of the tree preservation order and hedgerow plan

SCHEDULE 11
DEEMED MARINE LICENCE UNDER THE 2009 ACT—
GENERATION ASSETS

PART 1
LICENSED MARINE ACTIVITIES

1.—(1) In this licence—

“the 2004 Act” means the Energy Act 2004**(a)**;

“the 2008 Act” means the Planning Act 2008**(b)**;

“the 2009 Act” means the Marine and Coastal Access Act 2009**(c)**;

“2017 Regulations” means the Conservation of Offshore Marine Habitats and Species Regulations 2017;

“array area” means the area covered by Work No. 1 as shown on the offshore works plan;

“array area disposal site” means the site to be used for disposal of inert material of natural origin produced during construction drilling and seabed preparation for foundation works and cable sandwave clearance to be located within the array area;

“array cable” means the network of offshore subsea cables connecting the wind turbine generators in Work No. 1 and the offshore substations in Work No. 2;

“authorised deposits” means the substances and articles specified in paragraph 4 of Part 1 of this licence;

“authorised development” means the development and associated development described in Part 1 of Schedule 1 (authorised development) of the Order and any other development authorised by this Order that is development within the meaning of section 32 (meaning of “development”) of the 2008 Act;

“authorised project” means Work No. 1 described in paragraph 3 of Part 1 of this licence or any stage of that work;

“bridge link” means a steel truss structure with provision for overhead clearance for personnel, lighting fixtures and ancillary cabling, which can be used as a link for interconnection between any combination of permanent offshore electrical installations and/or offshore accommodation platform;

“buoy” means any floating device used for navigational purposes or measurement purposes, including LIDAR and wave buoys;

“cable crossings” means a crossing of existing sub-sea cables or pipelines or other existing infrastructure by a cable or, where cables run together in parallel, a set of cables, authorised by this Order together with cable protection;

“cable protection” means physical measures for the protection of cables including but not limited to concrete mattresses, and/or rock placement (including material used for cable crossings);

“cable protection replenishment” means the restoration to a former level or condition of cable protection lost by natural seabed processes or human activity;

(a) 2004 c.20.
(b) 2008 c.29.
(c) 2009 c.23.

“commence” means the first carrying out of any licensed marine activities authorised by this marine licence, save for pre-construction surveys and monitoring approved under this licence and the activities set out in article 2(d), and “commenced” and “commencement” must be construed accordingly;

“commissioning” means the process of assuring that all systems and components of the authorised development are tested to verify that they function and are operable in accordance with the design objectives, specifications and operational requirements of the undertaker;

“condition” means a condition in Part 2 of this licence;

“Defence Infrastructure Organisation Safeguarding” means Ministry of Defence Safeguarding, Defence Infrastructure Organisation – Safeguarding, St George’s House, DIO Head Office, DMS Whittington, Lichfield, Staffordshire, WS14 9PY and any successor body to its functions;

“Defra” means the Department for Environment, Food and Rural Affairs;

“dropped object procedure form” means the MMO notification proforma with reference MLDIR1 for reporting the loss or dumping of synthetic materials and other refuse at sea or any other format advised in writing by the MMO;

“enforcement officer” means a person authorised to carry out enforcement duties under Chapter 3 Part 4 (marine licensing) of the 2009 Act;

“environmental statement” means the document certified as the environmental statement by the Secretary of State for the purposes of the Order under article 38 (certification of plans and documents, etc.);

“European site” has the meaning given in regulation 27 (meaning of European site) of the 2017 Regulations;

“gravity base structures” means a structure principally of steel, concrete, or steel and concrete with a base which tapers as it rises which rests on the seabed due to its own weight with or without added ballast or additional skirts and associated equipment including J-tubes, corrosion protection systems and access platform(s) and equipment;

“habitats of principal importance” means a habitat designated as being of principal importance in accordance with section 41 (biodiversity lists and action (England)) of the Natural Environment and Rural Communities Act 2006(a);

“HAT” means highest astronomical tide;

“IHO S44ed5 Order 1a” means order 1a from the fifth edition of the International Hydrographic Organisation’s Standards for Hydrographics Surveys;

“interconnector cables” means a network of cables between the offshore substations;

“jacket foundation” means a lattice type structure constructed of steel, which may include additional equipment such as, J-tubes, corrosion protection systems and access platforms;

“JNCC” means the Joint Nature Conservation Committee;

“Kingfisher bulletin” means the bulletin published by the Humber Seafood Institute or such other alternative publication approved in writing by the MMO for the purposes of this licence;

“Kingfisher Information Service” means the information service from non-departmental government body Seafish;

“large offshore transformer substation” means the larger version of the offshore transformer substations assessed in the environment statement;

“LAT” means lowest astronomical tide;

“layout principles” means the document certified as the layout principles by the Secretary of State for the purposes of the Order under article 38 (certification of plans and documents, etc.);

(a) 2006 c.16.

“licensed activities” means the activities specified in Part 1 of this licence;

“maintain” includes inspect, upkeep, repair, adjust, and alter and further includes remove, reconstruct and replace (including replenishment of cable protection) but does not include the removal, reconstruction or replacement of foundations associated with the authorised project, to the extent assessed in the environmental statement and “maintenance” must be construed accordingly;

“Marine Management Organisation” or “MMO” means the Marine Management Organisation, Lancaster House, Hampshire Court, Newcastle upon Tyne, NE4 7YH who is the body created under the 2009 Act and who is responsible for the monitoring and enforcement of this licence;

“marine noise registry” means the database developed and maintained by JNCC on behalf of Defra to record the spatial and temporal distribution of impulsive noise generating activities in UK seas;

“MCA” means the Maritime and Coastguard Agency, an executive agency for the Department for Transport;

“mean high water springs” or “MHWS” means the highest level which spring tides reach on average over a period of time;

“mean low water springs” or “MLWS” means the lowest level which spring tides reach on average over a period of time;

“monopile foundation” means a steel pile, typically cylindrical, driven and/or drilled into the seabed and associated equipment including J-tubes, corrosion protection systems and access platforms and equipment;

“mono suction bucket foundation” means a steel cylindrical structure which partially or fully penetrates the seabed and remains in place using its own weight and hydrostatic pressure differential, and may include additional equipment such as J-tubes;

“offshore accommodation platform” means a structure above LAT and attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents), containing housing accommodation, storage, workshop, auxiliary equipment, and facilities for operating, maintaining and controlling the wind turbine generators and offshore electrical installations;

“offshore HVAC booster station” means a structure above LAT and attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents), containing—

- (a) electrical equipment required to provide reactive power compensation; and
- (b) housing accommodation, storage, workshop, auxiliary equipment, and facilities for operating, maintaining and controlling the substation;

“the offshore Order limits and grid coordinates plan” means the plan certified as the offshore Order limits and grid coordinates plan by the Secretary of State for the purposes of the Order under article 38 (certification of plans and documents etc.);

“Offshore Renewables Protocol for Reporting Archaeological Discoveries” means the Offshore Renewables Protocol for Reporting Archaeological Discoveries, the Crown Estate (2014), *Protocol for Archaeological Discoveries: Offshore Renewables Projects*, Salisbury, Wessex Archaeology as amended, updated or superseded from time to time;

“offshore transformer substation” means a structure above LAT and attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents), containing—

- (a) electrical equipment required to switch, transform, convert electricity generated at the wind turbine generators to a higher voltage and provide reactive power compensation; and
- (b) housing accommodation, storage, workshop auxiliary equipment, radar and facilities for operating, maintaining and controlling the substation or wind turbine generators;

“offshore works plan” means the plan certified as the offshore works plan by the Secretary of State for the purposes of the Order under article 38 (certification of plans and documents etc.);

“operation” means the undertaking of the licensed activities which are not part of the construction, commissioning or decommissioning of the authorised development;

“Order” means the Hornsea Four Offshore Wind Farm Order 202[];

“the Order limits” means the limits shown on the offshore Order limits and grid coordinates plans and the onshore Order limits plan within which the authorised project may be carried out, whose grid coordinates seaward of MHWS are set out in paragraph 5 of Part 1 of this Schedule;

“ornithological monitoring plan” means the document certified as the ornithological monitoring plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents etc.);

“outline cable specification and installation plan” means the document certified as the outline cable specification and installation plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents etc.);

“outline marine mammal mitigation protocol” means the document certified as the outline marine mammal mitigation protocol by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents etc.);

“outline marine written scheme of investigation” means the document certified as the outline marine written scheme of investigation by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents etc.);

“outline marine monitoring plan” means the document certified as the outline marine monitoring plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents etc.);

“outline operations and maintenance plan” means the document certified as the outline operations and maintenance plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents etc.);

“outline southern north sea special area of conservation site integrity plan” means the document certified as the outline southern north sea special area of conservation site integrity plan by the Secretary of State for the purposes of the Order under article 38 (certification of plans and documents etc.);

“pin piles” means steel cylindrical piles driven and/or drilled into the seabed to secure jacket foundations;

“pontoon gravity base type 1 structure” means a structure principally of steel, concrete, or steel and concrete with a base made up of up to two rectangular pontoons which rests on the seabed due to its own weight with or without added ballast or additional skirts and associated equipment including J-tubes, corrosion protection systems and access platform(s) and equipment;

“pontoon gravity base type 2 structure” means a structure principally of steel, concrete, or steel and concrete with a base made up of a pontoon arranged in a rectangle around an open centre which rests on the seabed due to its own weight with or without added ballast or additional skirts and associated equipment including J-tubes, corrosion protection systems and access platform(s) and equipment;

“pro-rata annex” means the document certified as the pro-rata annex by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents etc.);

“small offshore transformer substation” means the smaller version of the offshore transformer substations assessed in the environment statement;

“statutory historic body” means Historic England or its successor in function;

“statutory nature conservation body” means the appropriate nature conservation body as defined in Regulation 5 of the Conservation of Habitats and Species Regulations 2017 or its equivalent in the Conservation of Offshore Marine Habitats and Species Regulations 2017;

“suction bucket” means a steel cylindrical structure attached to the legs of a jacket foundation which partially or fully penetrates the seabed and remains in place using its own weight and hydrostatic pressure differential;

“transition piece” means the metal structure attached to the top of the foundation where the base of the wind turbine generator is connected and may include additional equipment such as J-tubes, corrosion protection systems, boat access systems, access platforms, craneage, radar, electrical transmission equipment and associated equipment;

“Trinity House” means the Corporation of Trinity House of Deptford Strond;

“UK Hydrographic Office” means the UK Hydrographic Office of Admiralty Way, Taunton, Somerset, TA1 2DN;

“undertaker” means Orsted Hornsea Project Four Limited (company number 08584182);

“vessel” means every description of vessel, however propelled or moved, and includes a non-displacement craft, a personal watercraft, a seaplane on the surface of the water, a hydrofoil vessel, a hovercraft or any other amphibious vehicle and any other thing constructed or adapted for movement through, in, on or over water and which is at the time in, on or over water;

“wind turbine generator” means a structure comprising a tower, rotor with three blades connected at the hub, nacelle and ancillary electrical and other equipment which may include J-tube(s), transition piece, access and rest platforms, access ladders, boat access systems, corrosion protection systems, fenders and maintenance equipment, helicopter landing facilities and other associated equipment, fixed to a foundation or transition piece;

“working day” means a day which is not a weekend, bank holiday or public holiday in England; and

“Work No. 2” means—

- (a) up to six small offshore transformer substations each fixed to the seabed by one of monopile foundations, mono suction bucket foundations, gravity base structures or jacket foundations and which may be connected to each other or one of the offshore accommodation platforms within Work No. 1(b) by a bridge link;
- (b) up to three large offshore transformer substations each fixed to the seabed by one of monopile foundations, mono suction bucket foundations, jacket foundations, box-type gravity base structures, gravity base structures, pontoon gravity base type 1 structures, or pontoon gravity base type 2 structures, and which may be connected to each other or one of the offshore accommodation platforms within Work No. 1(b) by a bridge link;
- (c) in the event that the mode of transmission is HVDC, either up to three large HVDC converter substations or up to six small HVDC converter substations fixed to the seabed within the area shown on the offshore works plan by one of monopile foundations, mono suction bucket foundations, jacket foundations, box-type gravity base structures, gravity base structures, pontoon gravity base type 1 structures, or pontoon gravity base type 2 structures;
- (d) a network of interconnector cables;
- (e) up to six cable circuits between Work No. 2 and Work No. 3, and between Work No. 3 and Work No. 5 consisting of offshore export cables along routes within the Order limits seaward of MLWS including one or more cable crossings; and
- (f) up to eight temporary horizontal directional drilling exit pits and associated cofferdams.

“Work No. 3(a)” means, in the event that the mode of transmission is HVAC, up to three offshore HVAC booster stations fixed to the seabed within the area shown on the offshore works plan by one of monopile foundations, mono suction bucket foundations, jacket foundations, gravity base structures, pontoon gravity base type 1 structures or pontoon gravity base type 2 structures; and

“UK Standard Marking Schedule for Offshore Installations” means the Standard Marking Schedule for Offshore Installations published by the Department of Energy & Climate Change with reference DECC 04/11.

(2) A reference to any statute, order, regulation or similar instrument is construed as a reference to a statute, order, regulation or instrument as amended by any subsequent statute, order, regulation or instrument or as contained in any subsequent re-enactment.

(3) Unless otherwise indicated—

- (a) all times are taken to be Greenwich Mean Time;
- (b) all co-ordinates are taken to be latitude and longitude degrees and minutes to two decimal places.

(4) Except where otherwise notified in writing by the relevant organisation, the primary point of contact with the organisations listed below and the address for returns and correspondence are—

(a) Civil Aviation Authority

Aviation House
Beehive Ringroad
Crawley
West Sussex

(b) Historic England

37 Tanner Road
York
YO1 6WP

(c) Marine Management Organisation

Marine Licensing Team
Lancaster House Hampshire Court
Newcastle Business Park
Newcastle upon Tyne
NE4 7YH

Tel: 0300 123 1032;

(d) Marine Management Organisation (Local Office)

Room 13, Ground Floor
Crosskill House
Mill Lane
Beverley
HU17 9JB

Tel: 0208 026 0519;

(e) Maritime and Coastguard Agency

Navigation Safety Branch
Bay 2/20, Spring Place
105 Commercial Road
Southampton
SO15 1EG

Tel: 020 3817 2433;

(f) Ministry of Defence (as requested by Defence Infrastructure Organisation – Safeguarding)

St George's House
DIO Head Office
DMS Whittington

Lichfield
Staffordshire
WS14 9PY;

(g) Natural England
4th Floor
Foss House
1-2 Peasholme Green
York
YO1 7PX
Tel: 0300 060 4911;

(h) Trinity House
Tower Hill
London
EC3N 4DH
Tel: 020 7481 6900;

(i) The United Kingdom Hydrographic Office
Admiralty Way
Taunton
Somerset
TA1 2DN
Tel: 01823 337 900.

(5) Unless otherwise advised in writing by the MMO, the address for electronic communication with the MMO for the purposes of this licence is marine.consent@marinemanagement.org.uk, or where contact to the Local Office if the MMO is required, beverley@marinemanagement.org.uk.

(6) Unless otherwise advised in writing by the MMO, the Marine Case Management System (“MCMS”) must be used for all licence returns or applications to vary this licence. The MCMS address is: <https://marinelicensing.marinemanagement.org.uk/>.

(7) Any reference in this licence or the documents certified by the Secretary of State for the purposes of the Order under article 38 to a dimension measured from LAT may be converted to a measurement from HAT by subtracting 4.71m from the measurement from LAT.

Details of licensed marine activities

2. Subject to the licence conditions at Part 4, this licence authorises the undertaker (and any agent or contractor acting on their behalf) to carry out the following licensable marine activities under section 66(1) (licensable marine activities) of the 2009 Act—

- (a) the deposit at sea within the Order limits seaward of MHWS of the substances and articles specified in paragraph 4 below and within Work No. 1 when combined with the disposal authorised within the array area disposal site by the deemed marine licence granted under Schedule 12 of the Order of up to 7,211,601 cubic metres (being a maximum, not an approximate upper figure) of inert material of natural origin produced during construction drilling or seabed preparation for foundation works and cable installation preparation works within the array area disposal site;
- (b) the construction of works in or over the sea and/or on or under the seabed;
- (c) dredging for the purposes of seabed preparation for foundation works and/or electrical circuit works;
- (d) the removal of sediment samples for the purposes of informing environmental monitoring under this licence during pre-construction, construction and operation;

- (e) boulder clearance works by displacement ploughing or subsea grab technique or any other comparable method;
- (f) removal of static fishing equipment; and
- (g) site preparation works.

3. Such activities described in paragraph 2 are authorised in relation to the construction, maintenance and operation of—

Work No. 1—

- (a) an offshore wind turbine generating station with a gross electrical output of over 100 megawatts comprising up to 180 wind turbine generators each fixed to the seabed by one of monopile foundations, mono suction bucket foundations, gravity base structures or jacket foundations;
- (b) one offshore accommodation platform fixed to the seabed within the area shown on the offshore works plan by one of monopile foundations, mono suction bucket foundations, a gravity base structure or jacket foundation and which may be connected to each other or one of the offshore substations within Work No. 2 by a bridge link; and
- (c) a network of cables between the wind turbine generators, and between the wind turbine generators and Work No. 2, including one or more cable crossings.

In connection with such Work No. 1 and to the extent that they do not otherwise form part of any such work, further associated development within the meaning of section 115(2) (development for which development consent may be granted) of the 2008 Act comprising such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised project and which fall within the scope of the work assessed by the environmental statement and the provisions of this licence including—

- (a) scour protection around the foundations of the offshore structures;
- (b) cable protection measures such as the placement of rock and/or concrete mattresses; and
- (c) temporary landing places, moorings or other means of accommodating or anchoring vessels in the construction and/or maintenance of the authorised development.

4. The substances or articles authorised for deposit at sea are—

- (a) iron and steel, copper and aluminium;
- (b) stone and rock;
- (c) concrete;
- (d) sand and gravel;
- (e) plastic and synthetic;
- (f) material extracted from within the offshore Order limits during construction drilling or seabed preparation for foundation works and cable installation preparation works;
- (g) weights used for the calibration of vessels, consisting of a hessian sack, metal shackles or chains; and
- (h) marine coatings, other chemicals and timber.

5. The grid coordinates for that part of the authorised development comprising Work No. 1 are specified below and more particularly on the offshore Order limits and grid coordinates plan—

<i>Point ID</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>	<i>Point ID</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>
1	54° 0' 23.321" N	1° 12' 48.805" E	5	54° 12' 37.143" N	0° 58' 31.095" E
2	54° 7' 24.985" N	0° 59' 54.702" E	6	54° 12' 17.413" N	1° 12' 18.263" E
3	54° 9' 13.497" N	1° 0' 43.850" E	7	54° 4' 13.012" N	1° 30' 5.270" E
4	54° 10' 49.480" N	0° 58' 21.782" E	8	53° 59' 15.598" N	1° 17' 20.651" E

General provisions

6. This licence remains in force until the authorised project has been decommissioned in accordance with a programme approved by the Secretary of State under section 106 (approval of decommissioning programmes) of the 2004 Act, including any modification to the programme under section 108 (reviews and revisions of decommissioning programmes) of the 2004 Act, and the completion of such programme has been confirmed by the Secretary of State in writing.

7. The provisions of section 72 (variation, suspension, revocation and transfer) of the 2009 Act apply to this licence except that the provisions of section 72(7) and (8) relating to the transfer of the licence only apply to a transfer not falling within article 5 (benefit of the Order).

8. With respect to any condition which requires the licensed activities be carried out in accordance with the plans, protocols or statements approved under this Schedule, the approved details, plan or scheme are taken to include any amendments that may subsequently be approved in writing by the MMO.

9. Any amendments to or variations from the approved details must be in accordance with the principles and assessments set out in the environmental statement. Such agreement may only be given in relation to immaterial changes where it has been demonstrated to the satisfaction of the MMO that it is unlikely to give rise to any materially new or materially greater environmental effects from those assessed in the environmental statement.

PART 2

CONDITIONS

Design parameters

1.—(1) The total number of wind turbine generators comprised in the authorised project must not exceed 180.

(2) Subject to sub-paragraph (3), each wind turbine generator forming part of the authorised project must not—

- (a) exceed a height of 370 metres when measured from LAT to the tip of the vertical blade;
- (b) exceed a rotor diameter of 305 metres;
- (c) be less than 42.43 metres from LAT to the lowest point of the rotating blade; and
- (d) be less than 810 metres from the nearest wind turbine generator in all directions.

(3) The minimum distance in sub-paragraph 1(2)(d) between each wind turbine generator is to be measured from the centre point of the wind turbine generator.

(4) Wind turbine generator foundation structures forming part of the authorised project must be one of the following foundation options—

- (a) monopile foundations;
- (b) mono suction bucket foundations;
- (c) gravity base structures; or
- (d) jacket foundations.

(5) No wind turbine generator—

- (a) jacket foundation employing pin piles forming part of the authorised project may—
 - (i) have a pin pile diameter of greater than four meters; and
 - (ii) employ more than 16 pin piles per jacket foundation; and
- (b) monopile foundation forming part of the authorised project may have a diameter greater than 15 metres.

(6) The total seabed footprint area for wind turbine generator foundations must not exceed—

- (a) 302,180 square metres excluding scour protection; and
- (b) 985,240 square metres including scour protection.

(7) The total volume of scour protection material for wind turbine generator foundations must not exceed 1,582,040 cubic metres.

(8) The total number of gravity base structures for wind turbine generators may not exceed 80.

(9) The wind turbine generators comprised in the authorised project must be constructed in accordance with the parameters set out in the pro-rata annex.

2.—(1) The total number of offshore accommodation platforms forming part of the authorised project must not exceed one.

(2) The dimensions of any offshore accommodation platform forming part of the authorised project must not exceed—

- (a) 64 metres in height when measured from LAT;
- (b) 60 metres in length; and
- (c) 60 metres in width.

(3) Offshore accommodation platform foundation structures forming part of the authorised project must be one of either monopile foundations, mono suction bucket foundations, gravity base structures, jacket foundations or box-type gravity base structures.

(4) No offshore accommodation platform—

- (a) jacket foundation employing pin piles forming part of the authorised project may—
 - (i) have a pin pile diameter of greater than four metres; and
 - (ii) employ more than 16 pin piles per jacket foundation; and
- (b) monopile foundation forming part of the authorised project may have a diameter greater than 15 metres.

(5) The total permanent seabed footprint area for offshore accommodation platform foundations must not exceed—

- (a) 5,625 square metres excluding scour protection; and
- (b) 30,625 square metres including scour protection.

(6) The offshore accommodation platform comprised in the authorised project must be constructed in accordance with parameters set out in the pro-rata annex.

(7) A bridge link forming part of the authorised project must be installed at a minimum height of 20 metres when measured from LAT.

3.—(1) The total length of the cables in Work No. 1(c) and the volume of their cable protection (including cable crossings) must not exceed the following—

<i>Work</i>	<i>Length</i>	<i>Cable protection</i>
Work No. 1(c)	600 kilometres	624,000 square metres

(2) The total number of cable crossings associated with the cables in Work No. 1(c) when combined with Work No. 2(d) as licenced under the licence in Schedule 12 of the Order must not exceed 32.

(3) The cables and cable circuits comprised in the authorised development must be constructed in accordance with the parameters set out in the pro-rata annex.

Maintenance of the authorised development

4.—(1) The undertaker may at any time maintain the authorised development, except to the extent that this licence or an agreement made under this licence provides otherwise.

(2) Maintenance works include but are not limited to—

- (a) major wind turbine component or offshore accommodation platform replacement;

- (b) painting and applying other coatings to wind turbine generators or offshore accommodation platforms;
- (c) bird waste and marine growth removal;
- (d) cable remedial burial;
- (e) cable repairs and replacement;
- (f) cable protection replenishment;
- (g) access ladder and boat landing replacement;
- (h) wind turbine generator and accommodation platform anode replacement; and
- (i) J-tube repair/replacement.

(3) In undertaking activities under condition 4(2)(f), the undertaker must not reduce water depth by more than 5% unless agreed with the MMO in writing.

(4) No maintenance works authorised by this licence may be carried out until an operations and maintenance plan substantially in accordance with the outline operations and maintenance plan has been submitted to and approved by the MMO in writing.

Vessels under the undertaker's control

5.—(1) The undertaker must issue to operators of vessels under its control operating within the Order limits a code of conduct to prevent collision risk or injury to marine mammals.

(2) The undertaker must ensure appropriate co-ordination of vessels within its control operating within the Order limits so as to reduce collision risk to other vessels including advisory safe passing distances for vessels.

Extension of time periods

6. Any time period given in this licence given to either the undertaker or the MMO may be extended with the agreement of the other party in writing such agreement not to be unreasonably withheld or delayed.

Notifications and inspections

7.—(1) The undertaker must ensure that—

- (a) a copy of this licence (issued as part of the grant of the Order) and any subsequent amendments or revisions to it is provided to—
 - (i) all agents and contractors notified to the MMO in accordance with condition 16; and
 - (ii) the masters and offshore operations managers responsible for the vessels notified to the MMO in accordance with condition 16;
- (b) within 28 days of receipt of a copy of this licence those persons referred to in paragraph (a) above must provide a completed confirmation form to the MMO confirming receipt of this licence.

(2) Only those persons and vessels notified to the MMO in accordance with condition 16 are permitted to carry out the licensed activities.

(3) Copies of this licence must also be available for inspection at the following locations—

- (a) the undertaker's registered address;
- (b) any site office located at or adjacent to the construction site and used by the undertaker or its agents and contractors responsible for the loading, transportation or deposit of the authorised deposits; and
- (c) on board each vessel and at the office of any offshore operations managers with responsibility for vessels from which authorised deposits or removals are to be made.

(4) The documents referred to in sub-paragraph (1)(a) must be available for inspection by an authorised enforcement officer at the locations set out in sub-paragraph (3)(b) above.

(5) The undertaker must ensure that a copy of this licence and any subsequent revisions or amendments has been read and understood by the masters of any vessel being used to carry on any licensed activity set out in condition 16(3), and that a copy of this licence is held on board any such vessel.

(6) The undertaker must provide access, and if necessary appropriate transportation, to the offshore construction site or any other associated works or vessels to facilitate any inspection that the MMO considers necessary to inspect the works during construction and operation of the authorised project.

(7) The undertaker must inform the MMO Local Office in writing at least five days prior to the commencement of the licensed activities and within five days of the completion of the licensed activity.

(8) The undertaker must inform the Kingfisher Information Service of details regarding the vessel routes, timings and locations relating to the construction of the authorised project or relevant stage—

(a) at least fourteen days prior to the commencement of offshore activities, for inclusion in the Kingfisher Bulletin and offshore hazard awareness data; and

(b) as soon as reasonably practicable, and in any event no later than 24 hours after completion of construction of all offshore activities,

confirmation of notification must be provided to the MMO in writing within five days.

(9) The undertaker must ensure that a local notification to mariners is issued at least 14 days prior to the commencement of the authorised project or any relevant stage advising of the start date of Work No. 1 and the expected vessel routes from the construction ports to the relevant location. Copies of all notices must be provided to the MMO, MCA and UK Hydrographic Office within five days of issue.

(10) The undertaker must ensure that local notifications to mariners are updated and reissued at weekly intervals during construction activities and at least five days before any planned operations and maintenance works and the notices must be supplemented with VHF radio broadcasts agreed with the MCA in accordance with the construction and monitoring programme approved under deemed marine licence condition 13(1)(b) and monitoring plan approved under condition 13(1)(f). Copies of all local notifications must be provided to the MMO and UK Hydrographic Office within five days of issue, save for in the case of a notice relating to operations and maintenance, which must be provided within 24 hours of issue.

(11) The undertaker must notify the UK Hydrographic Office of the commencement (within fourteen days), progress and completion of construction (within fourteen days) of the licensed activities in order that all necessary amendments to nautical and aeronautical charts are made and the undertaker must send a copy of such notifications to the MMO within five days of the notification.

(12) In case of damage to, or destruction or decay of, the authorised project seaward of MHWS or any part thereof, excluding the exposure of cables, the undertaker must as soon as reasonably practicable and no later than 24 hours following the undertaker becoming aware of any such damage, destruction or decay, notify the MMO, the MCA, Trinity House, the Kingfisher Information Service and the UK Hydrographic Office.

(13) In case of exposure of cables on or above the seabed, the undertaker must within three days following identification of a potential cable exposure, notify mariners and inform the Kingfisher Information Service of the location and extent of exposure. Copies of all notices must be provided to the MMO, the MCA, Trinity House and the UK Hydrographic Office within five days.

(14) The undertaker must notify the MMO in writing a minimum of five days in advance of the commencement of each discrete incident of cable repair, replacement, or protection replenishment activity. Such a notification must include proposed timings and a description of proposed methodologies.

(15) The undertaker must ensure that the MMO, the MMO Local Office, local mariners, local fishermen's organisations and the Source Data Receipt Team at the UK Hydrographic Office,

Taunton, Somerset, TA1 2DN (sdr@ukho.gov.uk) are notified within five days of completion of each instance of cable repair, replacement or protection replenishment activity.

Aids to navigation

8.—(1) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning of the authorised project seaward of MHWS exhibit such lights, marks, sounds, signals and other aids to navigation, and take such other steps for the prevention of danger to navigation as Trinity House may from time to time direct.

(2) The undertaker must during the period from the start of construction of the authorised project to completion of decommissioning of the authorised project seaward of MHWS keep Trinity House and the MMO informed in writing of progress of the authorised project seaward of MHWS including the following—

- (a) notice of commencement of construction of the authorised project within 24 hours of commencement having occurred;
- (b) notice within 24 hours of any aids to navigation being established by the undertaker; and
- (c) notice within five days of completion of construction of the authorised project.

(3) The undertaker must provide reports to Trinity House on the availability of aids to navigation in accordance with the frequencies set out in the aids to navigation management plan agreed pursuant to condition 13(1)(i) using the reporting system provided by Trinity House.

(4) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning of the authorised project seaward of MHWS notify Trinity House and the MMO in writing of any failure of the aids to navigation and the timescales and plans for remedying such failures, as soon as possible and no later than 24 hours following the undertaker becoming aware of any such failure.

(5) In the event that the provisions of condition 7(12) are invoked, the undertaker must lay down such buoys, exhibit such lights and take such other steps for preventing danger to navigation as directed by Trinity House.

(6) Any jack up barges or vessels utilised during the licensed activities, when jacked up, must exhibit signals in accordance with the UK Standard Marking Schedule for Offshore Installations.

Colouring of structures

9.—(1) The undertaker must colour all structures yellow (colour code RAL 1023) from at least highest astronomical tide to a height directed by Trinity House, or must colour the structure as directed by Trinity House from time to time.

(2) Subject to sub-paragraph (1) above, unless the MMO otherwise directs, the undertaker must ensure that the wind turbine generators are painted light grey (colour code RAL 7035).

Aviation safety

10.—(1) The undertaker must exhibit such lights, with such shape, colour and character as are required in writing by Air Navigation Order 2016^(a) and determined necessary for aviation safety in consultation with the Defence Infrastructure Organisation Safeguarding and as directed by the Civil Aviation Authority. Lighting installed specifically to meet Ministry of Defence aviation safety requirements must remain operational for the life of the authorised development unless otherwise agreed in writing with the Ministry of Defence.

(2) The undertaker must notify the Defence Infrastructure Organisation Safeguarding, the Civil Aviation Authority and the MMO, at least 14 days prior to the commencement of the licensed activities, in writing of the following information—

- (a) the date of the commencement of the licensed activities;

(a) S.I. 2016/765.

- (b) the date any wind turbine generators are to be installed;
- (c) the maximum height of any construction equipment or vessels to be used;
- (d) the maximum heights of any wind turbine generator and offshore accommodation platform to be constructed (including any antennae);
- (e) the latitude and longitude of each wind turbine generator and offshore accommodation platform to be constructed,

and the Defence Infrastructure Organisation Safeguarding and the Civil Aviation Authority must be notified of any changes to the information supplied under this paragraph of this condition and of the completion of the construction of the authorised project. Copies of notifications must be provided to the MMO.

Chemicals, drilling and debris

11.—(1) Unless otherwise agreed in writing by the MMO all chemicals used in the construction of the authorised project must be selected from the List of Notified Chemicals approved for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002(a) (as amended) as maintained by the Centre for Environment, Fisheries and Aquaculture Science.

(2) The undertaker must ensure that any coatings/treatments are suitable for use in the marine environment and are used in accordance with relevant guidelines approved by Health and Safety Executive.

(3) The storage, handling, transport and use of fuels, lubricants, chemicals and other substances must be undertaken so as to prevent releases into the marine environment, including bunding of 110% of the total volume of all reservoirs and containers.

(4) The undertaker must inform the MMO of the location and quantities of material disposed of each month under the Order, by submission of a disposal return by 31 January each year for the months August to January inclusive, and by 31 July each year for the months February to July inclusive.

(5) The undertaker must ensure that only inert material of natural origin, produced during the drilling installation of or seabed preparation for foundations, and drilling mud is disposed of within the Order limits seaward of MHWS.

(6) The undertaker must ensure that any rock material used in the construction of the authorised project is from a recognised source, free from contaminants and containing minimal fines.

(7) In the event that any rock material used in the construction of the authorised project is misplaced or lost below MHWS, the undertaker must report the loss to the MMO Local Office in writing within 48 hours of becoming aware of it and if the MMO, in consultation with the MCA and Trinity House, reasonably considers such material to constitute a navigation or environmental hazard (dependent on the size and nature of the material) the undertaker must endeavour to locate the material and recover it at its own expense.

(8) The undertaker must ensure that no waste concrete slurry or wash water from concrete or cement works are discharged into the marine environment. Concrete and cement mixing and washing areas should be contained to prevent run off entering the marine environment through the freeing ports.

(9) The undertaker must ensure that any oil, fuel or chemical spill within the marine environment is reported in writing to the MMO, Marine Pollution Response Team in accordance with the marine pollution contingency plan agreed under condition 13(1)(d)(i).

(10) All dropped objects within the Order limits must be reported to the MMO using the dropped object procedure form as soon as reasonably practicable following the undertaker becoming aware of an incident. On receipt of the dropped object procedure form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable

(a) S.I. 2002/1355.

to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.

Force majeure

12.—(1) If, due to stress of weather or any other cause the master of a vessel determines that it is necessary to deposit the authorised deposits within or outside of the Order limits because the safety of human life and/or of the vessel is threatened, within 48 hours full details of the circumstances of the deposit must be notified to the MMO in the manner provided in condition 11(10).

(2) The unauthorised deposits must be removed at the expense of the undertaker unless written approval is obtained from the MMO.

Pre-construction plans and documentation

13.—(1) The licensed activities for each stage of construction of the authorised project must not commence until the following (insofar as relevant to that activity or stage of activity) has been submitted to and approved in writing by the MMO, in consultation with, where relevant, Trinity House, the MCA and the UK Hydrographic Office—

- (a) A design plan, prepared in accordance with the layout principles at a scale of between 1:25,000 and 1:50,000, or in such other format as may be appropriate, including detailed representation on the most suitably scaled chart, which shows for the relevant stage—
 - (i) the proposed location, including grid co-ordinates of the centre point of the proposed location for each wind turbine generator, and offshore accommodation platform within the relevant stage, subject to any micro-siting required due to anthropological constraints, environmental constraints or difficult ground conditions discovered post approval under this condition and choice of foundation types for all wind turbine generators and offshore accommodation platforms within the relevant stage;
 - (ii) the number, specifications and dimensions of the wind turbine generators to be installed within the relevant stage;
 - (iii) the length and arrangement of cable comprising Work No. 1(c) within the relevant stage;
 - (iv) the dimensions of all monopile foundations, mono suction bucket foundations, jacket foundations or gravity base structures within the relevant stage; and
 - (v) any exclusion zones or micro-siting requirements identified in any mitigation project pursuant to sub-paragraph 13(2)(d) or relating to any habitats of principal importance identified as part of surveys undertaken in accordance with condition 17;to ensure conformity with the description of Work No. 1 and compliance with conditions 1, 2 and 3 above;
- (b) a construction programme to include details for the relevant stage of—
 - (i) the proposed construction start date;
 - (ii) proposed timings for mobilisation of plant delivery of materials and installation works; and
 - (iii) an indicative written construction programme for all wind turbine generators offshore accommodation platforms and cable comprised in the works at paragraph 1 to 3(b) of Part 1 (licensed marine activities) of this Schedule (insofar as not shown in paragraph (ii) above),
unless otherwise agreed in writing with the MMO;
- (c) a construction method statement in accordance with the construction methods assessed in the environmental statement and including details for the relevant stage of—
 - (i) foundation installation methodology, including drilling methods and disposal of drill arisings and material extracted during seabed preparation for foundation and cable

- installation works and having regard to any mitigation scheme pursuant to subparagraph 13(1)(f);
- (ii) advisory safe passing distances for vessels around construction sites;
 - (iii) cable (including fibre optic cable) installation;
 - (iv) contractors;
 - (v) vessels and vessels transit corridors;
 - (vi) codes of conduct for vessel operators;
 - (vii) associated ancillary works;
 - (viii) guard vessels to be employed;
 - (ix) details of means to address impacts on European sites, habitats of principal importance and any international or nationally designated sites, where relevant; and
 - (x) measures to ensure appropriate co-ordination with the Marine Helicopter Coordination Centre;
- (d) a construction project environmental management and monitoring plan covering the period of construction for the relevant stage to include details of—
- (i) a marine pollution contingency plan to address the risks, methods and procedures to deal with and report any spills and collision incidents of the authorised project in relation to all activities carried out;
 - (ii) a chemical risk review to include information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance;
 - (iii) a marine biosecurity plan detailing how the risk of introduction and spread of invasive non-native species will be minimised;
 - (iv) waste management and disposal arrangements;
 - (v) a vessel management plan, to determine vessel routing to and from construction sites and ports, to include a code of conduct for vessel operators; and
 - (vi) the appointment and responsibilities of a company fisheries liaison officer;
- (e) a scour protection management plan for the relevant stage providing details of the need, type, sources, quantity and installation methods for scour protection, which must be updated and resubmitted in writing for approval if changes to it are proposed following cable laying operations;
- (f) details for the relevant stage of proposed pre-construction monitoring surveys, construction monitoring, post-construction monitoring and related reporting in accordance with conditions 17, 18 and 19;
- (g) in the event that driven or part-driven pile foundations are proposed to be used for the relevant stage, a piling marine mammal mitigation protocol for that stage, in accordance with the outline marine mammal mitigation protocol, the intention of which is to prevent injury to marine mammals, including details of soft start procedures with specified duration periods following current best practice as advised by the relevant statutory nature conservation bodies;
- (h) a cable specification and installation plan for the relevant stage which accords with the principles of the outline cable specification and installation plan, to include—
- (i) technical specification of offshore cables (including fibre optic cable) below MHWS within that stage, including a desk-based assessment of attenuation of electromagnetic field strengths, shielding and cable burial depth in accordance with good industry practice;
 - (ii) a detailed cable laying plan for the Order limits within that stage, incorporating a burial risk assessment encompassing the identification of any cable protection that exceeds 5% of navigable depth referenced to Chart Datum and, in the event that any area of cable protection exceeding 5% of navigable depth is identified, details of any

steps (to be determined following consultation with the MCA and Trinity House) to be taken to ensure existing and future safe navigation is not compromised or similar such assessment to ascertain suitable burial depths and cable laying techniques, including cable protection;

- (iii) proposals for the volume and areas of cable protection to be used for each cable crossing, and proposals for timing and methodology for reporting on actual volumes and areas post construction within that stage; and
- (iv) proposals for monitoring offshore cables within that stage including cable protection during the operational lifetime of the authorised project which includes a risk based approach to the management of unburied or shallow buried cables;
- (i) an aids to navigation management plan for that stage to be agreed in writing by the MMO following consultation with Trinity House, to include details of how the undertaker will comply with the provisions of condition 8 relating to that stage for the lifetime of the authorised project;
- (j) in the event that driven or part-driven pile foundations are proposed to be used, the licensed activities, or any stage of those activities must not commence until a site integrity plan for that stage which accords with the principles set out in the outline southern north sea special area of conservation site integrity plan has been submitted in writing to the MMO and the MMO is satisfied that the plan provides such mitigation as is necessary to avoid adversely affecting the integrity (within the meaning of the 2017 Regulations) of a relevant site, to the extent that harbour porpoise are a protected feature of that site; and
- (k) an ornithological monitoring plan for the relevant stage which accords with the principles set out in the outline ornithological monitoring plan setting out the circumstances in which ornithological monitoring will be required and the monitoring to be carried out in such circumstances.

(2) Subject to condition 13(3), the licensed activities or any relevant stage of those activities must not commence unless no later than six months prior to the commencement of the relevant stage a marine written scheme of archaeological investigation for the stage in construction has been submitted to and approved by the MMO in writing, in accordance with the outline marine written scheme of investigation, and in accordance with industry good practice, in consultation with the statutory historic body to include—

- (a) details of responsibilities of the undertaker, archaeological consultant and contractor;
- (b) a method statement for further site investigation including any specifications for geophysical, geotechnical and diver or remotely operated vehicle investigations;
- (c) archaeological analysis of survey data, and timetable for reporting, which is to be submitted to the MMO within six months of any survey being completed;
- (d) delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones prior to construction;
- (e) monitoring of archaeological exclusion zones during and post construction, including provision of a report on such monitoring;
- (f) a requirement for the undertaker to ensure that a copy of any agreed archaeological report is deposited with the National Record of the Historic Environment, by submitting a Historic England OASIS ('online access to the index of archaeological investigations') form with a digital copy of the report within six months of completion of construction of the authorised project, and to notify the MMO that the OASIS form has been submitted to the National Record of the Historic Environment within two weeks of submission;
- (g) a reporting and recording protocol, designed in reference to the Offshore Renewables Protocol for Reporting Archaeological Discoveries as set out by the Crown Estate and reporting of any wreck or wreck material during construction, operation and decommissioning of the authorised project; and
- (h) a timetable for all further site investigations, which must allow sufficient opportunity to establish a full understanding of the historic environment within the offshore Order limits

and the approval of any necessary mitigation required as a result of the further site investigations prior to commencement of licensed activities.

(3) Pre-construction archaeological investigations and pre-commencement material operations which involve intrusive seabed works must only take place in accordance with a written scheme of investigation specific to the relevant pre-construction activities (which must accord with the details set out in the outline marine written scheme of investigation) which has been submitted to and approved by the MMO in consultation with the statutory historic body.

(4) In the event that driven or part-driven pile foundations are proposed to be used, the hammer energy used to drive or part-drive monopile foundations must not exceed 5,000kJ and the hammer energy used to drive or part-drive pin pile foundations must not exceed 3,000kJ.

(5) No more than two vessels may be engaged at any time in activities related to piling for the licenced activities. There will only be a maximum installation of two piled foundations within a 24-hour period. It is possible for installation of the two piled foundations to occur concurrently i.e. within a 24-hour period at up to two locations within the area of Work No. 3(a) or up to two locations within the array. The two piled foundation locations may also be piled simultaneously.

(6) The licensed activities or any part of those activities must not commence until a fisheries coexistence and liaison plan in accordance with the outline fisheries coexistence and liaison plan has been submitted to and approved by the MMO in writing.

(7) The undertaker must, before submitting any pre-construction plans and documentation required under this condition, provide a copy of the plans and documentation to any other undertaker to whom part of the benefit of this Order has been transferred or leased pursuant to article 5 of the Order.

(8) The undertaker to whom part of the benefit of the Order has been transferred or leased pursuant to article 5 must provide any comments on the plans and documentation to the undertaker within 14 days of receipt.

(9) The undertaker and any other undertaker must participate in liaison meetings as requested from time to time by the MMO in writing in advance and must consider such matters as are determined by the MMO relating to the efficient operation of a deemed marine licence issued under this Order (including as varied or transferred).

14.—(1) Except where otherwise stated or agreed in writing with the MMO, each programme, statement, plan, protocol or scheme required to be approved under condition 13 (save for that required under condition 13(1)(f)) must be submitted for approval at least four months prior to the intended commencement of the relevant stage of the licensed activities, save for the following documents, which must be submitted to the MMO for approval at least six months prior to the intended commencement of the relevant stage of the licenced activities—

- (a) marine written scheme of archaeological investigation pursuant to condition 13(2);
- (b) fisheries coexistence and liaison plan pursuant to condition 13(6);
- (c) design plan pursuant to condition 13(1)(a); and
- (d) cable specification and installation plan pursuant to condition 13(1)(h).

(2) The pre-construction monitoring surveys, construction monitoring, post-construction monitoring and related reporting required under condition 13(1)(f) must be submitted in accordance with the following, unless otherwise agreed in writing with the MMO—

- (a) at least four months prior to the first survey of the relevant stage, detail of any pre-construction surveys and an outline of all proposed monitoring;
- (b) at least four months prior to construction of the relevant stage, detail on construction monitoring; and
- (c) at least four months prior to commissioning of the relevant stage, detail of post-construction (and operational) monitoring.

(3) The MMO must determine an application for approval made under condition 13 within a period of four months commencing on the date the application is received by the MMO, unless

otherwise agreed in writing with the undertaker such agreement not to be unreasonably withheld or delayed.

(4) The licensed activities for the relevant stage must be carried out in accordance with the approved plans, protocols, statements, schemes and details approved under condition 13, unless otherwise agreed in writing by the MMO.

(5) The plans, protocols, statements, schemes and details submitted under condition 13 must ensure that any residual effects fall within the scope of those predicted in the environmental statement.

Offshore safety management

15. No stage of the authorised project may commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and, so far as is applicable to that stage of the authorised project adequately addressed all MCA recommendations as appropriate to the authorised project contained within MGN654 “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes.

Reporting of engaged agents, contractors and vessels

16.—(1) The undertaker must provide the following information to the MMO—

- (a) the name, company number, address and function of any agent, contractor or sub-contractor appointed to engage in the licensed activities not less than ten working days prior to such agent or contractor commencing any licensed activity; and
- (b) each week during the construction of the authorised project a list of the vessels currently and to be used in relation to the licensed activities, including the master’s name, vessel type, vessel IMO number and vessel owner or operating company.

(2) Any changes to the supplied details must be notified to the MMO in writing prior to the agent, contractor or vessel engaging in the licensed activities.

(3) The undertaker must notify the MMO in writing not less than 24 hours prior to the commencement of major component exchanges, ladder replacements or cable related works—

- (a) any agents, contractors or subcontractors that will carry out such works; and
- (b) any vessel proposed to be used for such works, including the master’s name, vessel type, vessel IMO number and vessel owner or operating company.

Pre-construction monitoring and surveys

17.—(1) The undertaker must in discharging condition 13(1)(f) for each stage of construction submit a monitoring plan or plans for that stage in accordance with an outline marine monitoring plan for written approval by the MMO in consultation with the relevant statutory bodies, which must contain details of proposed surveys, including methodologies and timings, and a proposed format and content for a pre-construction baseline report and—

- (a) the survey proposals must be in accordance with the principles set out in the outline marine monitoring plan and must specify each survey’s objectives and explain how it will assist in either informing a useful and valid comparison with the post-construction position or will enable the validation or otherwise of key predictions in the environmental statement; and
- (b) the baseline report proposals must ensure that the outcome of the agreed surveys together with existing data and reports are drawn together to present a valid statement of the preconstruction position, with any limitations, and must make clear what post-construction comparison is intended and the justification for this being required.

(2) Subject to receipt from the undertaker of specific proposals pursuant to this condition, the pre-construction survey proposals must comprise, in outline—

- (a) a full sea floor coverage swath–bathymetry survey that meets the requirements of IHO S44ed5 Order 1a, of the Order limits and a buffer outside to—
- (i) determine the location, extent and composition of any biogenic or geogenic reef features, as set out within the outline marine monitoring plan;
 - (ii) inform future navigation risk assessments as part of the cable specification and installation plan; and
 - (iii) inform the identification of any archaeological exclusion zone and post consent monitoring of any such archaeological exclusion zone;
- (b) any ornithological monitoring required by the ornithological monitoring plans submitted in accordance with condition 13(1)(k).
- (c) a bathymetric survey that meets the requirements of IHO S44ed5 Order 1a of the area within the following coordinates—

<i>Development area node point</i>	<i>WGS84 UTM Zone 31N (metres)</i>		<i>WGS84 (DMS)</i>		<i>WGS84 (decimal degrees)</i>	
	<i>Easting</i>	<i>Northing</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Latitude</i>	<i>Longitude</i>
1	401818	5992480	54° 4' 16.157" N	1° 29' 58.386" E	54.07115	1.49955
2	411109	5984944	54° 0' 18.479" N	1° 38' 37.320" E	54.00513	1.64370
3	397695	5985627	54° 0' 31.626" N	1° 26' 19.993" E	54.00878	1.43889
4	397800	5978992	53° 56' 57.085" N	1° 26' 33.766" E	53.94919	1.44271
5	387657	5983579	53° 59' 17.868" N	1° 17' 11.556" E	53.98830	1.28654
6	401818	5992480	54° 4' 16.157" N	1° 29' 58.386" E	54.07115	1.49955

(3) The pre-construction survey(s) carried out pursuant to condition 17(2)(a)(ii) and 17(2)(c) must fulfil the requirements of MGN654 and its supporting ‘Hydrographic Guidelines for Offshore Renewable Energy Developer’ (as relevant).

(4) The undertaker must carry out the surveys specified within the monitoring plan or plans in accordance with that plan or plans, unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation body.

(5) Following completion of a survey carried out pursuant to this condition and prior to construction of the relevant stage, the undertaker must provide a report and full density data of the survey outcomes to the MMO, the relevant statutory nature conservation body, the MCA and UK Hydrographic Office as relevant.

Construction monitoring

18.—(1) The undertaker must in discharging condition 13(1)(f) for each stage of construction submit a construction monitoring plan or plans for that stage in accordance with an outline marine monitoring plan for written approval by the MMO in consultation with the relevant statutory nature conservation body, which must include details of any proposed construction monitoring, including methodologies and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must be in accordance with the principles set out in the outline marine monitoring plan and must specify each survey’s objectives and explain how it will assist in either informing a useful and valid comparison with the pre-construction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

(2) Subject to receipt from the undertaker of specific proposals pursuant to this condition the construction monitoring plan must include, in outline—

- (a) vessel traffic monitoring by automatic identification system for the duration of the construction period, with provision for a report to be submitted to the MMO, Trinity House, and the MCA annually during the construction period for the authorised development; and
- (b) where piled foundations are to be employed, unless otherwise agreed by the MMO in writing, details of proposed monitoring of the noise generated by the installation of the first four piled foundations of each piled foundation type to be constructed collectively under this licence and the licence granted under Schedule 12 of the Order.

(3) The results of the initial noise measurements monitored in accordance with sub-paragraph 18(2)(b) must be provided in writing to the MMO within six weeks of the installation (unless otherwise agreed) of the first four piled foundations of each piled foundation type. The assessment of this report by the MMO will determine whether any further noise monitoring is required. If, in the opinion of the MMO in consultation with the statutory nature conservation body, the assessment shows impacts significantly in excess to those assessed in the environmental statement and there has been a failure of the mitigations set out in the marine mammal mitigation protocol, all piling activity must cease until an update to the marine mammal mitigation protocol and further monitoring requirements have been agreed.

(4) The undertaker must carry out the surveys specified within the construction monitoring plan or plans in accordance with that plan or plans, including any further noise monitoring required in writing by the MMO under condition 18(3), unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation body.

Post-construction monitoring

19.—(1) The undertaker must in discharging condition 13(1)(f) for each stage of construction submit a post-construction monitoring plan or plans for that stage in accordance with an outline marine monitoring plan for written approval by the MMO in consultation with the relevant statutory nature conservation body including details of proposed post-construction surveys, including methodologies (including appropriate buffers, where relevant) and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must be in accordance with the principles set out in the outline marine monitoring plan and must specify each survey's objectives and explain how it will assist in either informing a useful and valid comparison with the preconstruction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

(2) Subject to receipt of specific proposals the post-construction survey plan or plans must include, in outline—

- (a) details of a survey to determine any change in the location, extent and composition of any biogenic or geogenic reef feature identified in the pre-construction survey in the parts of the offshore Order limits in which construction works were carried out. The survey design must be informed by the results of the pre-construction benthic survey;
- (b) a bathymetric survey to monitor the effectiveness of archaeological exclusion zones. The data will be analysed by an accredited archaeologist as defined in the offshore written scheme of investigation required under condition 13(2);
- (c) any ornithological monitoring required by the ornithological monitoring plans submitted in accordance with condition 13(1)(k); and
- (d) vessel traffic monitoring by automatic identification system for a duration of three consecutive years following the completion of construction of the authorised project, unless otherwise agreed in writing by the MMO, with provision for a report to be submitted annually to the MMO, Trinity House, and the MCA.

(3) The undertaker must carry out the surveys agreed under the post-construction monitoring plan or plans in accordance with that plan or plans and provide the agreed reports in the agreed

format, unless otherwise agreed in writing with the MMO in consultation with the relevant statutory nature conservation body.

(4) Within 12 weeks of completion of any cable repair or replacement works, the undertaker must undertake a post installation survey along the section of cable that has undergone repair or replacement to demonstrate the successful burial of the cable, and submit a report to the MMO in writing on its findings.

Timing of monitoring report

20. Any monitoring report compiled in accordance with the monitoring plans provided under conditions 17, 18 and 19 must be provided to the relevant body no later than four months following receipt by the undertaker of the results of monitoring to which it relates, unless otherwise agreed with the relevant body in writing.

Reporting of impact pile driving

21.—(1) Only when driven or part-driven pile foundations are proposed to be used as part of the foundation installation the undertaker must provide the following information to the Marine Noise Registry—

- (a) prior to the commencement of each stage of construction of the licensed activities, information on the expected location, start and end dates of impact pile driving to satisfy the Marine Noise Registry’s Forward Look requirements;
- (b) at six month intervals following the commencement of pile driving, information on the locations and dates of impact pile driving to satisfy the Marine Noise Registry’s Close Out requirements; and
- (c) within 12 weeks of completion of impact pile driving, information on the locations and dates of impact pile driving to satisfy the Marine Noise Registry’s Close Out requirements.

(2) The undertaker must notify the MMO in writing of the successful submission of Forward Look or Close Out data pursuant to paragraph (1) above within 7 days of the submission.

(3) For the purpose of this condition, “Forward Look” and “Close Out” mean the requirements as set out in the UK Marine Noise Registry Information Document Version 1 (July 2015) as amended, updated or superseded from time to time.

Maintenance reporting

22.—(1) An annual maintenance report must be submitted to the MMO in writing within one month following the first anniversary of the date of commencement of operations, and every year thereafter until the permanent cessation of operation.

(2) The report must provide a record of the licensed activities as set out in condition 4 during the preceding year, the timing of activities and methodologies used.

(3) Every fifth year, the undertaker must submit to the MMO in writing, within one month of that date, a consolidated maintenance report, which will—

- (a) include a review of licensed activities undertaken during the preceding five years with reference to the reports submitted in accordance with condition 22(1) of this licence;
- (b) reconfirm the applicability of the methodologies and frequencies of the licensable activities permitted by this licence for the remaining duration of this licence.

Stages of construction

23.—(1) The licenced activities must not be commenced until a written scheme setting out the stages of construction of the authorised development seaward of MHWS has been submitted to and approved by the MMO in writing.

(2) The stages of construction referred to in sub-paragraph (1) will not permit the authorised development to be constructed in more than one overall phase.

(3) The scheme must be implemented as approved.

(4) The written scheme referred to in sub-paragraph (1) must be submitted to the MMO in writing four months prior to the planned commencement of the licenced activities.

Completion of construction

24.—(1) The undertaker must submit a close out report in writing to the MMO and the relevant statutory nature conservation body within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following details—

- (a) the final number of installed wind turbine generators; and
- (b) the installed wind turbine generator parameters relevant for ornithological collision risk modelling.

(2) Following completion of construction, no further construction activities can be undertaken under this licence.

25. The undertaker must submit a close out report to the MCA and the UK Hydrographic Office within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following—

- (a) the final number of installed wind turbine generators;
- (b) a plan of the layout of installed wind turbine generators and offshore accommodation platform; and
- (c) latitude and longitude coordinates of the centre point of the location of each wind turbine generator and offshore accommodation platform, provided as Geographical Information System data referenced to WGS84 datum.

Deployment of cable protection

26. Any cable protection authorised under this licence must be deployed within 15 years from the date of the grant of the Order unless otherwise agreed by the MMO in writing.

SCHEDULE 12
DEEMED MARINE LICENCE UNDER THE 2009 ACT –
TRANSMISSION ASSETS

PART 1
LICENSED MARINE ACTIVITIES

1.—(1) In this licence—

“the 2004 Act” means the Energy Act 2004**(a)**;

“the 2008 Act” means the Planning Act 2008**(b)**;

“the 2009 Act” means the Marine and Coastal Access Act 2009**(c)**;

“2017 Offshore Regulations” means the Conservation of Offshore Marine Habitats and Species Regulations 2017;

“2017 Onshore Regulations” means the Conservation of Habitats and Species Regulations 2017;

“ancillary works” means those works listed in Schedule 1 Part 2 of the Order;

“array area” means the area covered by Work No. 1 as shown on the offshore works plan;

“array area disposal site” means the site to be used for disposal of inert material of natural origin produced during construction drilling and seabed preparation for foundation works and cable sandwave clearance to be located within the array area;

“authorised deposits” means the substances and articles specified in paragraph 4 of Part 1 of this licence;

“authorised development” means the development and associated development described in Part 1 of Schedule 1 (authorised development) of the Order and any other development authorised by this Order that is development within the meaning of section 32 (meaning of “development”) of the 2008 Act;

“authorised project” means Work Nos. 2, 3, 4 and 5 as described in paragraph 3 of Part 1 of this licence or any stage of that work;

“box-type gravity base structure” means a structure principally of steel, concrete, or steel and concrete with a square base which rests on the seabed due to its own weight with or without added ballast or additional skirts and associated equipment including J-tubes, corrosion protection systems and access platform(s) and equipment;

“bridge link” means a steel truss structure with provision for overhead clearance for personnel, lighting fixtures and ancillary cabling, which can be used as a link for interconnection between any combination of permanent offshore electrical installations and/or offshore accommodation platform

“buoy” means any floating device used for navigational or measurement purposes, including LIDAR and wave buoys;

“cable corridor” means that area of Work No. 2 which lies outside of the array area, along with the area of Work Nos. 3, 4 and 5;

(a) 2004 c.20.
(b) 2008 c.29.
(c) 2009 c.23.

“cable corridor disposal site” means the site, within the cable corridor, to be used for disposal of inert material of natural origin produced during construction drilling and seabed preparation for foundation works and cable sandwave clearance;

“cable protection” means physical measures for the protection of cables including but not limited to concrete mattresses, and/or rock placement (including material used for cable crossings);

“cable protection replenishment” means the restoration to a former level or condition of cable protection lost by natural seabed processes or human activity;

“commence” means the first carrying out of any licensed marine activities authorised by this marine licence, save for pre-construction surveys and monitoring approved under this licence and the activities set out in article 2(e) and “commenced” and “commencement” must be construed accordingly;

“commissioning” means the process of assuring that all systems and components of the authorised development are tested to verify that they function and are operable in accordance with the design objectives, specifications and operational requirements of the undertaker;

“condition” means a condition in Part 2 of this licence;

“Defence Infrastructure Organisation Safeguarding” means Ministry of Defence Safeguarding, Defence Infrastructure Organisation – Safeguarding, St George’s House, DIO Head Office, DMS Whittington, Lichfield, Staffordshire, WS14 9PY and any successor body to its functions;

“Defra” means the Department for Environment, Food and Rural; Affairs;

“dropped object procedure form” means the MMO notification proforma with reference MLDIR1 for reporting the loss or dumping of synthetic materials and other refuse at sea or any other format advised in writing by the MMO;

“enforcement officer” means a person authorised to carry out enforcement duties under Chapter 3 of Part 4 (marine licensing) of the 2009 Act;

“environmental statement” means the document certified as the environmental statement by the Secretary of State for the purposes of the Order under article 38 (certification of plans and documents, etc.);

“European site” has the meaning given in regulation 27 of the 2017 Offshore Regulations or regulation 8 of the 2017 Onshore Regulations as appropriate;

“gravity base structure” means a structure principally of steel, concrete, or steel and concrete with a base which tapers as it rises which rests on the seabed due to its own weight with or without added ballast or additional skirts and associated equipment including J-tubes, corrosion protection systems and access platform(s) and equipment;

“habitats of principal importance” means a habitat designated as being of principal importance in accordance with section 41 (biodiversity lists and action (England)) of the Natural Environment and Rural Communities Act 2006;

“HAT” means highest astronomical tide;

“HVAC booster station lighting plan” means the plan certified as the HVAC booster station lighting plan by the Secretary of State for the purposes of the Order under article 38 (certification of plans and documents, etc.);

“HVDC” means high voltage direct current;

“IHO S44ed5 Order 1a” means order 1a from the fifth edition of the International Hydrographic Organisation’s Standards for Hydrographics Surveys;

“interconnector cables” means a network of cables between the offshore substations;

“jacket foundation” means a lattice type structure constructed of steel, which may include additional equipment such as, J-tubes, corrosion protection systems and access platforms;

“JNCC” means the Joint Nature Conservation Committee;

“Kingfisher Bulletin” means the bulletin published by the Humber Seafood Institute or such other alternative publication approved in writing by the MMO for the purposes of this licence;

“Kingfisher Information Service” means the information service from non-departmental government body Seafish;

“large offshore HVDC converter substation” means the larger version of the offshore converter substations assessed in the environment statement;

“large offshore transformer substation” means the larger version of the offshore transformer substations assessed in the environment statement;

“LAT” means lowest astronomical tide;

“layout principles” means the document certified as the layout principles by the Secretary of State for the purposes of the Order under article 38 (certification of plans and documents, etc.);

“licensed activities” means the activities specified in Part 1 of this licence;

“maintain” includes inspect, upkeep, repair, adjust, and alter and further includes remove, reconstruct and replace (including replenishment of cable protection) but does not include the removal, reconstruction or replacement of foundations associated with the authorised project, to the extent assessed in the environmental statement; and “maintenance” must be construed accordingly;

“Marine Management Organisation” or “MMO” means the Marine Management Organisation, Lancaster House, Hampshire Court, Newcastle upon Tyne, NE4 7YH who is the body created under the 2009 Act and who is responsible for the monitoring and enforcement of this licence;

“marine noise registry” means the database developed and maintained by JNCC on behalf of Defra to record the spatial and temporal distribution of impulsive noise generating activities in UK seas;

“MCA” means the Maritime and Coastguard Agency, an executive agency for the Department for Transport;;

“mean high water springs” or “MHWS” means the highest level which spring tides reach on average over a period of time;

“mean low water springs” or “MLWS” means the lowest level which spring tides reach on average over a period of time;

“monopile foundation” means a steel pile, typically cylindrical, driven and/or drilled into the seabed and associated equipment including J-tubes, corrosion protection systems and access platforms and equipment;

“mono suction bucket foundation” means a steel cylindrical structure which partially or fully penetrates the seabed and remains in place using its own weight and hydrostatic pressure differential, and may include additional equipment such as J-tubes;

“offshore accommodation platform” means a structure above LAT and attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents), containing housing accommodation, storage, workshop, auxiliary equipment, and facilities for operating, maintaining and controlling the wind turbine generators and offshore electrical installations;

“offshore electrical installations” means the small offshore transformer substations, the large offshore transformer substations, the offshore HVAC booster stations, the small offshore HVDC converter substations and the large offshore HVDC converter substations forming part of the authorised development;

“offshore export cable” means a network of cables for as described in Work No. 2(e) and Work No. 3(d);

“offshore HVAC booster station” means a structure above LAT and attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents), containing—

(a) electrical equipment required to provide reactive power compensation; and

(b) housing accommodation, storage, workshop, auxiliary equipment, and facilities for operating, maintaining and controlling the substation;

“the offshore Order limits and grid coordinates plan” means the plan certified as the offshore Order limits and grid coordinates plan by the Secretary of State for the purposes of the Order under article 38 (certification of plans and documents, etc.);

“Offshore Renewables Protocol for Reporting Archaeological Discoveries” means the Offshore Renewables Protocol for Reporting Archaeological Discoveries, the Crown Estate (2014), *Protocol for Archaeological Discoveries: Offshore Renewables Projects*, Salisbury, Wessex Archaeology as amended, updated or superseded from time to time;

“offshore transformer substation” means a structure above LAT and attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents), containing—

(a) electrical equipment required to switch, transform, convert electricity generated at the wind turbine generators to a higher voltage and provide reactive power compensation; and

(b) housing accommodation, storage, workshop auxiliary equipment, radar and facilities for operating, maintaining and controlling the substation or wind turbine generators;

“offshore works plan” means the plan certified as the offshore works plan by the Secretary of State for the purposes of the Order under article 38 (certification of plans and documents, etc.);

“operation” means the undertaking of licensed activities which are not part of the construction, commissioning or decommissioning of the authorised development;

“Order” means the Hornsea Four Offshore Wind Farm Order 20[];

“the Order limits” means the limits shown on the offshore Order limits and grid coordinates plans and the onshore Order limits plan within which the authorised project may be carried out, whose grid coordinates seaward of MHWS are set out in paragraph 5 of Part 1 of this Schedule;

“outline cable specification and installation plan” means the document certified as the outline cable specification and installation plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline marine mammal mitigation protocol” means the document certified as the outline marine mammal mitigation protocol by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline marine monitoring plan” means the document certified as the outline marine monitoring plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline marine written scheme of investigation” means the document certified as the outline marine written scheme of investigation by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline operations and maintenance plan” means the document certified as the outline operations and maintenance plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“outline southern north sea special area of conservation site integrity plan” means the document certified as the outline southern north sea special area of conservation site integrity plan by the Secretary of State for the purposes of this Order;

“pin piles” means steel cylindrical piles driven and/or drilled into the seabed to secure jacket foundations;

“pontoon gravity base type 1 structure” means a structure principally of steel, concrete, or steel and concrete with a base made up of up to two rectangular pontoons which rests on the seabed due to its own weight with or without added ballast or additional skirts and associated equipment including J-tubes, corrosion protection systems and access platform(s) and equipment;

“pontoon gravity base type 2 structure” means a structure principally of steel, concrete, or steel and concrete with a base made up of a pontoon arranged in a rectangle around an open centre which rests on the seabed due to its own weight with or without added ballast or additional skirts and associated equipment including J-tubes, corrosion protection systems and access platform(s) and equipment;

“pro-rata annex” means the document certified as the pro-rata annex by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents, etc.);

“small offshore HVDC converter substation” means the smaller version of the offshore transformer substations assessed in the environment statement;

“small offshore transformer substation” means the smaller version of the offshore transformer substations assessed in the environment statement;

“statutory historic body” means Historic England, the relevant local authority or its successor in function;

“statutory nature conservation body” means the appropriate nature conservation body as defined in Regulation 5 of the Conservation of Offshore Marine Habitats and Species Regulations 2017;

“suction bucket” means a steel cylindrical structure attached to the legs of a jacket foundation which partially or fully penetrates the seabed and remains in place using its own weight and hydrostatic pressure differential;

“transition piece” means the metal structure attached to the top of the foundation where the base of the wind turbine generator is connected and may include additional equipment such as J-tubes, corrosion protection systems, boat access systems, access platforms, craneage, radar, electrical transmission equipment and associated equipment;

“Trinity House” means the Corporation of Trinity House of Deptford Strond;

“UK Hydrographic Office” means the UK Hydrographic Office of Admiralty Way, Taunton, Somerset, TA1 2DN;

“undertaker” means Orsted Hornsea Project Four Limited (company number 08584182);

“vessel” means every description of vessel, however propelled or moved, and includes a non-displacement craft, a personal watercraft, a seaplane on the surface of the water, a hydrofoil vessel, a hovercraft or any other amphibious vehicle and any other thing constructed or adapted for movement through, in, on or over water and which is at the time in, on or over water;

“wind turbine generator” means a structure comprising a tower, rotor with three blades connected at the hub, nacelle and ancillary electrical and other equipment which may include J-tube(s), transition piece, access and rest platforms, access ladders, boat access systems, corrosion protection systems, fenders and maintenance equipment, helicopter landing facilities and other associated equipment, fixed to a foundation or transition piece; and

“working day” means a day which is not a weekend, bank or public holiday in England; and

“UK Standard Marking Schedule for Offshore Installations” means the Standard Marking Schedule for Offshore Installations published by the Department of Energy & Climate Change with reference DECC 04/11.

(2) A reference to any statute, order, regulation or similar instrument is construed as a reference to a statute, order, regulation or instrument as amended by any subsequent statute, order, regulation or instrument or as contained in any subsequent re-enactment.

(3) Unless otherwise indicated—

(a) all times are taken to be Greenwich Mean Time; and

(b) all co-ordinates are taken to be latitude and longitude degrees and minutes to two decimal places.

(4) Except where otherwise notified in writing by the relevant organisation, the primary point of contact with the organisations listed below and the address for returns and correspondence are—

(a) Civil Aviation Authority

- Aviation House
Beehive Ringroad
Crawley
West Sussex
RH6 0YR
- (b) Historic England
37 Tanner Road
York
YO1 6WP
- (c) Marine Management Organisation
Marine Licensing Team
Lancaster House Hampshire Court
Newcastle Business Park
Newcastle upon Tyne
NE4 7YH
Tel: 0300 123 1032;
- (d) Marine Management Organisation (Local Office)
Room 13, Ground Floor
Crosskill House
Mill Lane
Beverley
HU17 9JB
Tel: 0208 026 0519;
- (e) Maritime and Coastguard Agency
Navigation Safety Branch
Bay 2/20, Spring Place
105 Commercial Road
Southampton
SO15 1EG
Tel: 020 3817 2433;
- (f) Ministry of Defence (as represented by Defence Infrastructure Organisation –
Safeguarding)
St George's House
DIO Head Office
DMS Whittington
Lichfield
Staffordshire
WS14 9PY;
- (g) Natural England
4th Floor
Foss House
1-2 Peasholme Green
York

YO1 7PX

Tel: 0300 060 4911;

(h) Trinity House

Tower Hill

London

EC3N 4DH

Tel: 020 7481 6900;

(i) The United Kingdom Hydrographic Office

Admiralty Way

Taunton

Somerset

TA1 2DN

Tel: 01823 337 900.

(5) Unless otherwise advised in writing by the MMO, the address for electronic communication with the MMO for the purposes of this licence is marine.consents@marinemangement.org.uk, or where contact to the Local Office of the MMO is required, beverley@marinemangement.org.uk.

(6) Unless otherwise advised in writing by the MMO, the Marine Case Management System (“MCMS”) must be used for all licence returns or applications to vary this licence. The MCMS address is: <https://marinelicensing.marinemangement.org.uk/>.

(7) Any reference in this licence or the documents certified by the Secretary of State for the purposes of the Order under article 38 (certification of plans and documents, etc.) to a dimension measured from LAT may be converted to a measurement from HAT by subtracting 4.71m from the measurement from LAT.

Details of licensed marine activities

2. Subject to the licence conditions at Part 4, this licence authorises the undertaker (and any agent or contractor acting on their behalf) to carry out the following licensable marine activities under section 66(1) (licensable marine activities) of the 2009 Act—

- (a) the deposit at sea within the Order limits seaward of MHWS of the substances and articles specified in paragraph 4 below and within—
 - (i) the array area disposal site, when combined with the disposal authorised by the deemed marine licence granted under Schedule 11 of the Order, up to 7,211,601 cubic metres (being a maximum, not an approximate upper figure) of inert material of natural origin produced during construction drilling or seabed preparation for foundation works and cable installation preparation and excavation of horizontal directional drilling pits works within the parts of Work No. 2 that lie within the array area; and
 - (ii) the cable corridor disposal site of up to 4,105,735 cubic metres (being a maximum, not an approximate upper figure) of inert material of natural origin produced during construction drilling or seabed preparation for foundation works and cable installation preparation and excavation of horizontal directional drilling pits works within Work Nos. 2 (which lie within the cable corridor), 3, 4 and 5;
- (b) the construction of works in or over the sea or on or under the sea bed;
- (c) dredging for the purposes of seabed preparation for foundation works and/or electrical circuit works;
- (d) boulder clearance works by displacement ploughing or subsea grab technique or any other equivalent method;
- (e) the removal of sediment samples for the purposes of informing environmental monitoring under this licence during pre-construction, construction and operation;

- (f) removal of static fishing equipment; and
- (g) site preparation works.

3. Such activities are authorised in relation to the construction, maintenance and operation of—

Work No. 2—

- (a) up to six small offshore transformer substations each fixed to the seabed by one of monopile foundations, mono suction bucket foundations, gravity base structures or jacket foundations, and which may be connected to each other or one of the offshore accommodation platforms within Work No. 1(b) by a bridge link;
- (b) up to three large offshore transformer substations each fixed to the seabed by one of monopile foundations, mono suction bucket foundations, box-type gravity base structures, or jacket foundations, pontoon gravity base type 1 structures, or pontoon gravity base type 2 structures, and which may be connected to each other or one of the offshore accommodation platforms within Work No. 1(b) by a bridge link;
- (c) in the event that the mode of transmission is HVDC, either up to three either large HVDC converter substations or up to six small HVDC converter substations fixed to the seabed within the area shown on the offshore works plan by one of monopile foundations, mono suction bucket foundations, jacket foundations, box-type gravity base structures, gravity base structures, pontoon gravity base type 1 structures, or pontoon gravity base type 2 structures;
- (d) a network of interconnector cables;
- (e) up to six cable circuits between Work No. 2 and Work No. 3, and between Work No. 3 and Work No. 5 consisting of offshore export cables along routes within the Order limits seaward of MLWS including one or more cable crossings; and
- (f) up to eight temporary horizontal directional drilling exit pits and associated cofferdams.

Work No. 3—

- (a) in the event that the mode of transmission is HVAC, up to three offshore HVAC booster stations fixed to the seabed within the area shown on the offshore works plan by one of monopile foundations, mono suction bucket foundations, jacket foundations, gravity base structures, pontoon gravity base type 1 structures or pontoon gravity base type 2 structures; and
- (b) in the event that the mode of transmission is HVAC, up to six cable circuits between Work No. 2 and Work No. 3, and between Work No. 3 and Work No. 5 consisting of offshore export cables along routes within the Order limits seaward of MHWS including one or more cable crossings.

Work No. 4— a temporary work area associated with Work No. 2 and Work No. 3 for vessels to carry out anchoring and positioning alongside Work No. 2 or Work No. 3.

Work No. 5— works consisting of—

- (a) up to six cable circuits and associated electrical circuit ducts between Work No. 3 to Work No. 6; and
- (b) up to eight horizontal directional drilling exit pits, unless Work No. 2(f) is constructed.

Work No. 9— temporary works as follows—

- (a) temporary vehicular access tracks as shown on the offshore works plans;
- (b) *not used*
- (c) *not used*
- (d) temporary construction ramp as shown on the offshore works plans.

In connection with such Works Nos. 2, 3, 4 and 5 and to the extent that they do not otherwise form part of any such work, further associated development within the meaning of section 115(2) (development for which consent may be granted) of the 2008 Act comprising such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the

authorised project and which fall within the scope of the work assessed by the environmental statement and the provisions of this license, including—

- (a) scour protection around the foundations of the offshore electrical installations;
- (b) cable protection measures such as the placement of rock and/or concrete mattresses;
- (c) the removal of material from the seabed within the Order limits the disposal within—
 - (i) the array area disposal site, in combination with the disposal authorised by the deemed marine licence granted under Schedule 11 of the Order, up to 7,211,601 cubic metres of inert material of natural origin produced during construction drilling or seabed preparation for foundation works and cable installation preparation works (such as sandwave clearance and boulder clearance) and excavation of horizontal directional drilling pits works within the parts of Work No. 2 that lie within the array area; and
 - (ii) the cable corridor disposal site up to 4,105,735 cubic metres of inert material of natural origin within Order limits produced during construction drilling and seabed preparation for foundation works and cable sandwave clearance works required or the construction of Work Nos. 2 (which lie within the cable corridor), 3, 4 and 5; and
- (d) temporary landing places, moorings or other means of accommodating vessels in the construction and/or maintenance of the authorised development.

4. The substances or articles authorised for deposit at sea are—

- (a) iron and steel, copper and aluminium;
- (b) stone and rock;
- (c) concrete;
- (d) sand and gravel;
- (e) plastic and synthetic;
- (f) material extracted from within the offshore Order limits during construction drilling and seabed preparation for foundation works cable installation preparation works and excavation of horizontal directional drilling pits; and
- (g) marine coatings, other chemicals and timber.

5. The grid coordinates for that part of the authorised development comprising Work Nos. 2, 3, 4, 5, 9a and 9d are specified below and more particularly on the offshore Order limits and grid coordinates plan—

<i>Point ID</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>	<i>Point ID</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>
1	54° 2' 7.166" N	0° 12' 58.381" W	68	53° 59' 17.868" N	1° 17' 11.556" E
2	54° 2' 7.022" N	0° 12' 48.680" W	69	53° 58' 55.615" N	1° 16' 14.402" E
3	54° 2' 28.905" N	0° 12' 23.610" W	70	53° 58' 54.680" N	1° 16' 10.907" E
4	54° 3' 4.330" N	0° 9' 20.564" W	71	53° 58' 54.305" N	1° 16' 7.041" E
5	54° 3' 2.961" N	0° 8' 57.136" W	72	53° 58' 48.150" N	1° 9' 3.489" E
6	54° 3' 46.646" N	0° 6' 22.355" W	73	53° 58' 49.099" N	1° 8' 56.253 E
7	54° 3' 55.011" N	0° 6' 0.668" W	74	53° 59' 33.340" N	1° 5' 22.618" E
8	54° 4' 5.592" N	0° 5' 7.239" W	75	53° 59' 16.728" N	1° 0' 29.597" E
9	54° 4' 7.120" N	0° 4' 56.079" W	76	53° 59' 10.802" N	0° 59' 53.488" E
10	54° 4' 7.947" N	0° 4' 12.149" W	77	53° 59' 0.241" N	0° 59' 7.651" E
11	54° 4' 7.646" N	0° 4' 2.450" W	78	53° 58' 58.446" N	0° 58' 57.385" E
12	54° 3' 39.131" N	0° 1' 17.603" E	79	53° 58' 53.673" N	0° 57' 53.130" E
13	54° 3' 36.602" N	0° 1' 19.983" E	80	53° 58' 53.613" N	0° 57' 45.865" E
14	54° 3' 36.653" N	0° 1' 27.388" E	81	53° 58' 54.420" N	0° 57' 26.213" E
15	54° 3' 37.742" N	0° 1' 33.117" E	82	53° 58' 58.248" N	0° 56' 45.174" E

16	54° 3' 31.432" N	0° 2' 43.501" E	83	53° 59' 56.956" N	0° 50' 1.171" E
17	54° 3' 21.791" N	0° 4' 54.431" E	84	54° 0' 12.504" N	0° 48' 1.381" E
18	54° 3' 20.107" N	0° 5' 29.470" E	85	54° 0' 12.515" N	0° 47' 27.367" E
19	54° 3' 20.504" N	0° 5' 36.188" E	86	54° 0' 13.296" N	0° 46' 40.673" E
20	54° 3' 29.852" N	0° 6' 6.995" E	87	54° 0' 12.634" N	0° 46' 30.459" E
21	54° 4' 17.513" N	0° 8' 11.780" E	88	54° 0' 11.415" N	0° 46' 24.233" E
22	54° 4' 19.804" N	0° 8' 20.650" E	89	53° 59' 39.945" N	0° 44' 55.026" E
23	54° 4' 29.084" N	0° 9' 5.618" E	90	53° 59' 33.773" N	0° 44' 35.130" E
24	54° 4' 30.902" N	0° 9' 18.035" E	91	53° 59' 28.402" N	0° 44' 15.020" E
25	54° 4' 31.360" N	0° 9' 29.006" E	92	53° 59' 26.858" N	0° 44' 5.508" E
26	54° 4' 30.770" N	0° 11' 14.823" E	93	53° 59' 23.738" N	0° 43' 35.842" E
27	54° 4' 41.436" N	0° 13' 46.313" E	94	53° 59' 23.191" N	0° 42' 42.267" E
28	54° 4' 51.664" N	0° 18' 10.115" E	95	53° 59' 23.584" N	0° 42' 32.090" E
29	54° 4' 49.674" N	0° 22' 20.794" E	96	53° 59' 29.653" N	0° 41' 39.599" E
30	54° 4' 34.602" N	0° 25' 8.241" E	97	53° 59' 31.433" N	0° 41' 30.497" E
31	54° 3' 47.343" N	0° 28' 41.594" E	98	53° 59' 34.340" N	0° 41' 20.783" E
32	54° 3' 29.522" N	0° 29' 45.309" E	99	54° 1' 11.539" N	0° 37' 38.060" E
33	54° 3' 12.983" N	0° 30' 41.496" E	100	54° 1' 53.954" N	0° 30' 4.210" E
34	54° 3' 11.866" N	0° 30' 46.755" E	101	54° 1' 55.082" N	0° 29' 58.960" E
35	54° 2' 29.831" N	0° 38' 16.384" E	102	54° 2' 16.836" N	0° 28' 45.068" E
36	54° 2' 28.252" N	0° 38' 27.328" E	103	54° 2' 34.272" N	0° 27' 42.729" E
37	54° 2' 25.710" N	0° 38' 37.464" E	104	54° 3' 14.191" N	0° 24' 52.548" E
38	54° 2' 22.467" N	0° 38' 46.275" E	105	54° 3' 28.906" N	0° 22' 9.330" E
39	54° 0' 46.742" N	0° 42' 25.062" E	106	54° 3' 30.827" N	0° 18' 25.085" E
40	54° 0' 44.114" N	0° 42' 47.823" E	107	54° 3' 25.965" N	0° 15' 11.395" E
41	54° 0' 44.168" N	0° 42' 53.983" E	108	54° 3' 10.152" N	0° 11' 26.334" E
42	54° 0' 37.964" N	0° 43' 8.166" E	109	54° 3' 9.658" N	0° 11' 1.640" E
43	54° 0' 33.962" N	0° 43' 31.109" E	110	54° 3' 10.393" N	0° 9' 39.559" E
44	54° 0' 51.704" N	0° 44' 6.496" E	111	54° 3' 7.676" N	0° 9' 26.386" E
45	54° 0' 57.175" N	0° 44' 19.901" E	112	54° 3' 13.846" N	0° 8' 47.985" E
46	54° 1' 20.169" N	0° 45' 45.285" E	113	54° 1' 59.146" N	0° 5' 34.054" E
47	54° 1' 22.890" N	0° 46' 0.288" E	114	54° 1' 59.193" N	0° 5' 24.927" E
48	54° 1' 33.372" N	0° 47' 34.265" E	115	54° 2' 1.399" N	0° 4' 39.525" E
49	54° 1' 33.357" N	0° 48' 6.711" E	116	54° 2' 14.627" N	0° 1' 34.678" E
50	54° 1' 32.702" N	0° 48' 19.691" E	117	54° 2' 13.616" N	0° 1' 29.370" E
51	54° 1' 26.938" N	0° 49' 8.341" E	118	54° 2' 9.931" N	0° 1' 16.745" W
52	54° 1' 15.588" N	0° 50' 33.236" E	119	54° 1' 43.569" N	0° 0' 7.896" W
53	54° 0' 17.357" N	0° 57' 13.969" E	120	54° 1' 31.663" N	0° 0' 25.766" W
54	54° 0' 15.266" N	0° 57' 36.824" E	121	54° 1' 7.679" N	0° 1' 51.463" W
55	54° 0' 14.766" N	0° 57' 48.644" E	122	54° 1' 0.011" N	0° 2' 21.082" W
56	54° 0' 17.493" N	0° 58' 26.081" E	123	54° 1' 0.055" N	0° 4' 18.699" W
57	54° 0' 27.621" N	0° 59' 10.323" E	124	54° 1' 25.632" N	0° 12' 25.517" W
58	54° 0' 36.596" N	1° 0' 6.568" E	125	54° 1' 41.883" N	0° 12' 50.086" W
59	54° 0' 53.351" N	1° 4' 59.324" E	126	54° 1' 39.112" N	0° 12' 50.078" W
60	54° 2' 51.236" N	1° 8' 18.052" E	127	54° 1' 39.246" N	0° 12' 59.069" W
61	54° 7' 24.985" N	0° 59' 54.702" E	128	54° 1' 39.257" N	0° 12' 59.850" W
62	54° 9' 13.497" N	1° 0' 43.850" E	129	54° 1' 39.742" N	0° 12' 59.821" W
63	54° 10' 49.480" N	0° 58' 21.782" E	130	54° 1' 39.731" N	0° 12' 59.103" W

64	54° 12' 37.143" N	0° 58' 31.095" E	131	54° 1' 43.574" N	0° 12' 59.118" W
65	54° 12' 17.413" N	1° 12' 18.263" E	132	54° 1' 43.811" N	0° 12' 59.860" W
66	54° 4' 13.012" N	1° 30' 5.270" E	133	54° 2' 7.201" N	0° 13' 0.387" W
67	53° 59' 15.598" N	1° 17' 20.651" E			

General provisions

6. This licence remains in force until the authorised project has been decommissioned in accordance with a programme approved by the Secretary of State under section 106 (approval of decommissioning programmes) of the 2004 Act, including any modification to the programme under section 108 (reviews and revisions of decommissioning programmes), and the completion of such programme has been confirmed by the Secretary of State in writing.

7. The provisions of section 72 (variation, suspension, revocation and transfer) of the 2009 Act apply to this licence except that the provisions of sections 72(7) and (8) relating to the transfer of the licence only apply to a transfer not falling within article 5 (benefit of the Order).

8. With respect to any condition which requires the licensed activities be carried out in accordance with the plans, protocols or statements approved under this Schedule, the approved details, plan or scheme are taken to include any amendments that may subsequently be approved in writing by the MMO.

9. Any amendments to or variations from the approved details must be in accordance with the principles and assessments set out in the environmental statement. Such agreement may only be given in relation to immaterial changes where it has been demonstrated to the satisfaction of the MMO that it is unlikely to give rise to any materially new or materially greater environmental effects from those assessed in the environmental statement.

PART 2 CONDITIONS

Design parameters

1.—(1) The total number of offshore electrical installations must not exceed nine, and consisting of a combination of no more than—

- (a) six small offshore transformer substations;
- (b) three large offshore transformer substations;
- (c) three offshore HVAC booster stations;
- (d) six small offshore HVDC converter substations; and
- (e) three large offshore HVDC converter substations.

(2) The dimensions of any small offshore transformer substations (including auxiliary structures, but excluding masts, radar and antennae) forming part of the authorised project must not exceed—

- (a) 100 metres in height when measured from LAT;
- (b) 90 metres in length; and
- (c) 90 metres in width.

(3) The dimensions of any large offshore transformer substations (including auxiliary structures, such as a helipad, crane, lightning protection, but excluding masts, radar and antennae) forming part of the authorised project must not exceed—

- (a) 100 metres in height when measured from LAT;
- (b) 180 metres in length; and

- (c) 90 metres in width.
- (4) The dimensions of any offshore HVAC booster station (including auxiliary structures, such as a helipad, crane, lightning protection, but excluding masts, radar and antennae) forming part of the authorised project must not exceed—
 - (a) 100 metres in height when measured from LAT;
 - (b) 90 metres in length; and
 - (c) 90 metres in width.
- (5) The dimensions of any small offshore HVDC converter substations (including auxiliary structures, such as a helipad, crane, lightning protection, but excluding masts, radar and antennae) forming part of the authorised project must not exceed—
 - (a) 90 metres in height when measured from LAT;
 - (b) 100 metres in length; and
 - (c) 100 metres in width.
- (6) The dimensions of any large offshore HVDC converter substations (including auxiliary structures, such as a helipad, crane, lightning protection, but excluding masts, radar and antennae) forming part of the authorised project must not exceed—
 - (a) 100 metres in height when measured from LAT;
 - (b) 180 metres in length; and
 - (c) 90 metres in width.
- (7) Offshore electrical installation foundation structures forming part of the authorised project must be one of the following foundation options—
 - (a) for small offshore transformer substations and offshore HVAC booster stations either monopile foundations, mono suction bucket foundations, gravity base structures, jacket foundations or box-type gravity base structures; and
 - (b) for large offshore transformer substations and offshore HVDC converter stations either monopile foundations, mono suction bucket foundations, jacket foundations, box-type gravity base structures, gravity base structures, pontoon gravity base type 1 structures, or pontoon gravity base type 2 structures.
- (8) No offshore electrical installation—
 - (a) jacket foundation employing pin piles forming part of the authorised project may—
 - (i) have a pin pile diameter of greater than four metres; and
 - (ii) employ more than 16 pin piles per jacket foundation; and
 - (b) monopile foundation forming part of the authorised project may have a diameter greater than 15 metres.
- (9) The total seabed footprint area for offshore electrical installation foundations must not exceed—
 - (a) 101,250 square metres excluding scour protection; and
 - (b) 371,250 square metres including scour protection.
- (10) The area of scour protection material for offshore electrical installation foundations must not exceed 270,000 square metres.
- (11) The total number of cable crossings when combined with the deemed marine licence granted under Schedule 11 of the Order must not exceed 86, unless otherwise agreed in writing between the undertaker and the MMO.
- (12) The total number of gravity base structures must not exceed ten for offshore electrical installations, or nine where the offshore accommodation platform authorised by the deemed marine licence granted under Schedule 11 of the Order utilises a gravity base structure.
- (13) The offshore electrical installations comprised in the authorised project must be constructed in accordance with the parameters set out in the pro-rata annex.

(14) A bridge link forming part of the authorised project must be installed at a minimum height of 20 metres when measured from LAT.

2. The total length of the cables and the volume of their cable protection (including cable crossings) must not exceed the following—

<i>Work</i>	<i>Length</i>	<i>Cable protection</i>
Work Nos. 2 and 3 and 5	744 kilometres	1,068,500 cubic metres

3.—(1) The total length of the cables in Work No. 2(d) and (e) and the volume of their cable protection when combined with the cable authorised under Work No. 1(c) of the deemed marine licence granted under Schedule 11 of the Order must not exceed the following—

<i>Length</i>	<i>Cable protection</i>
1,344 kilometres	1,449,000 cubic metres

(2) No more than 5% of the length of cables within Work No. 2(e) and Work No. 3(b) falling within the Smithic Bank, being the area bounded by the following coordinates, shall be subject to cable protection, unless otherwise agreed in writing with the MMO—

<i>Coordinate ID</i>	<i>Easting (ETRS89 UTM31N)</i>	<i>Northing (ETRS89 UTM31N)</i>	<i>Longitude (WGS84)</i>	<i>Latitude (WGS84)</i>
1	298274.67	5990918.71	-0.07990	54.02704
2	298127.19	5990333.27	-0.08175	54.02172
3	294845.62	5990773.47	-0.13207	54.02438
4	294845.60	5990773.48	-0.13207	54.02438
5	293307.25	5990979.83	-0.15565	54.02562
6	293307.23	5990979.84	-0.15565	54.02562
7	293234.22	5990989.63	-0.15677	54.02568
8	293248.01	5991617.59	-0.15699	54.03132
9	293357.03	5992381.64	-0.15585	54.03822
10	293485.99	5993033.45	-0.15432	54.04412
11	293595.22	5993351.56	-0.15288	54.04702
12	295812.89	5993972.30	-0.11947	54.05347
13	295814.17	5993972.66	-0.11945	54.05348
14	295815.45	5993973.03	-0.11943	54.05348
15	296409.98	5994139.44	-0.11048	54.05521
16	296416.88	5994141.37	-0.11037	54.05523
17	297196.58	5994359.61	-0.09863	54.05749
18	297201.62	5994361.02	-0.09855	54.05751
19	297686.58	5994496.76	-0.09124	54.05892
20	297703.95	5994501.62	-0.09098	54.05897
21	297879.77	5994550.84	-0.08833	54.05948
22	297897.33	5994556.10	-0.08807	54.05953
23	297914.68	5994562.01	-0.08781	54.05959
24	297931.81	5994568.54	-0.08755	54.05966
25	297948.69	5994575.70	-0.08730	54.05973
26	298025.95	5994610.17	-0.08614	54.06007
27	298102.19	5994644.18	-0.08500	54.06040
28	298382.32	5994769.14	-0.08081	54.06163
29	298391.64	5993962.56	-0.08013	54.05440
30	298294.20	5992800.25	-0.08085	54.04393
31	298298.27	5991819.11	-0.08013	54.03513
32	298274.67	5990918.71	-0.07990	54.02704

(3) No cable protection may be employed within 350 metres seaward of MLWS tidal datum, measured as a straight line.

(4) The cables and cable circuits comprised in the authorised development must not exceed the parameters set out in the pro-rata annex.

Maintenance of the authorised development

4.—(1) The undertaker may at any time maintain the authorised development, except to the extent that this licence or an agreement made under this licence provides otherwise.

(2) Maintenance works include but are not limited to—

- (a) offshore electrical installation component replacement;
- (b) offshore electrical installation painting and applying other coatings;
- (c) bird waste and marine growth removal;
- (d) cable remedial burial;
- (e) cable repairs and replacement;
- (f) cable protection replenishment;
- (g) access ladder and boat landing replacement;
- (h) replacement of offshore electrical installation anodes; and
- (i) J-tube repair/replacement.

(3) In undertaking activities under condition 4(2)(f), the undertaker must not reduce water depth by more than 5% unless agreed with the MMO in writing.

(4) No maintenance works authorised by this licence may be carried out until an operations and maintenance plan substantially in accordance with the outline operations and maintenance plan has been submitted to and approved by the MMO in writing.

Vessels under the undertaker's control

5.—(1) The undertaker must issue to operators of vessels under its control operating within the Order limits a code of conduct to prevent collision risk or injury to marine mammals.

(2) The undertaker must ensure appropriate co-ordination of vessels within its control operating within the Order limits so as to reduce collision risk to other vessels including advisory safe passing distances for vessels.

Extension of time periods

6. Any time period given in this licence given to either the undertaker or the MMO may be extended with the agreement of the other party in writing such agreement not to be unreasonably withheld or delayed.

Notifications and inspections

7.—(1) The undertaker must ensure that—

- (a) a copy of this licence (issued as part of the grant of the Order) and any subsequent amendments or revisions to it is provided to—
 - (i) all agents and contractors notified to the MMO in accordance with condition 16; and
 - (ii) the masters and offshore operations managers responsible for the vessels notified to the MMO in accordance with condition 16.
- (b) within 28 days of receipt of a copy of this licence those persons referred to in subparagraph (a) above must provide a completed confirmation form to the MMO confirming receipt of this licence.

(2) Only those persons and vessels notified to the MMO in accordance with condition 16 are permitted to carry out the licensed activities.

(3) Copies of this licence must also be available for inspection at the following locations—

- (a) the undertaker's registered address;
- (b) any site office located at or adjacent to the construction site and used by the undertaker or its agents and contractors responsible for the loading, transportation or deposit of the authorised deposits; and
- (c) on board each vessel and at the office of any offshore operations manager with responsibility for vessels from which authorised deposits or removals are to be made.

(4) The documents referred to in sub-paragraph (1)(a) must be available for inspection by an authorised enforcement officer at the locations set out in sub-paragraph (3)(b) above.

(5) The undertaker must ensure that a copy of this licence and any subsequent revisions or amendments has been read and understood by the masters of any vessel being used to carry on any licensed activity set out in condition 16(3), and that a copy of this licence is held on board any such vessel.

(6) The undertaker must provide access, and if necessary appropriate transportation, to the offshore construction site or any other associated works or vessels to facilitate any inspection that the MMO considers necessary to inspect the works during construction and operation of the authorised project.

(7) The undertaker must inform the MMO Local Office in writing at least five days prior to the commencement of the licensed activities or any stage of them and within five days of the completion of the licensed activity.

(8) The undertaker must inform the Kingfisher Information Service of details regarding the vessel routes, timings and locations relating to the construction of the authorised project or relevant stage—

- (a) at least fourteen days prior to the commencement of offshore activities, for inclusion in the Kingfisher Bulletin and offshore hazard awareness data; and
- (b) as soon as reasonably practicable, and in any event no later than 24 hours after completion of construction of all offshore activities,

confirmation of notification must be provided to the MMO in writing within five days.

(9) The undertaker must ensure that a local notification to mariners is issued at least 14 days prior to the commencement of the authorised project or any relevant stage advising of the start date of Work No. 1 and the expected vessel routes from the construction ports to the relevant location. Copies of all notices must be provided to the MMO, MCA and UK Hydrographic Office within five days of issue.

(10) The undertaker must ensure that local notifications to mariners are updated and reissued at weekly intervals during construction activities and at least five days before any planned operations and maintenance works and the notices must be supplemented with VHF radio broadcasts agreed with the MCA in accordance with the construction and monitoring programme approved under deemed marine licence condition 13(1)(b) and monitoring plan approved under condition 13(1)(f). Copies of all local notifications must be provided to the MMO and UK Hydrographic Office within five days of issue, save for in the case of a notice relating to operations and maintenance, which must be provided within 24 hours of issue.

(11) The undertaker must notify the UK Hydrographic Office both of the commencement (within fourteen days), progress and completion of construction (within fourteen days) of the licensed activities in order that all necessary amendments to nautical and aeronautical charts are made and the undertaker must send a copy of such notifications to the MMO within five days of the notification.

(12) In case of damage to, or destruction or decay of, the authorised project seaward of MHWS or any part thereof, excluding the exposure of cables, the undertaker must as soon as reasonably practicable and no later than 24 hours following the undertaker becoming aware of any such

damage, destruction or decay, notify the MMO, the MCA, Trinity House, the Kingfisher Information Service and the UK Hydrographic Office.

(13) In case of exposure of cables on or above the seabed, the undertaker must within three days of identification of a potential cable exposure, notify mariners and inform the Kingfisher Information Service of the location and extent of exposure. Copies of all notices must be provided to the MMO, the MCA, Trinity House and the UK Hydrographic Office within five days.

(14) The undertaker must notify the MMO in writing a minimum of five days in advance of the commencement of each discrete incident of cable repair, replacement, or protection replenishment activity. Such a notification must include proposed timings and a description of proposed methodologies.

(15) The undertaker must ensure that the MMO, the MMO Local Office, local mariners, local fishermen's organisations and the Source Data Receipt Team at the UK Hydrographic Office, Taunton, Somerset, TA1 2DN (sdr@ukho.gov.uk) are notified within five days of completion of each instance of cable repair, replacement or protection replenishment activity.

Aids to navigation

8.—(1) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning of the authorised project seaward of MHWS exhibit such lights, marks, sounds, signals and other aids to navigation, and take such other steps for the prevention of danger to navigation as Trinity House may from time to time direct.

(2) The undertaker must during the period from the start of construction of the authorised project to completion of decommissioning of the authorised project seaward of MHWS keep Trinity House and the MMO informed in writing of progress of the authorised project seaward of MHWS including the following—

- (a) notice of commencement of construction of the authorised project within 24 hours of commencement having occurred;
- (b) notice within 24 hours of any aids to navigation being established by the undertaker; and
- (c) notice within five days of completion of construction of the authorised project.

(3) The undertaker must provide reports to Trinity House on the availability of aids to navigation in accordance with the frequencies set out in the aids to navigation management plan agreed pursuant to condition 13(1)(i) using the reporting system provided by Trinity House.

(4) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning of the authorised project seaward of MHWS notify Trinity House and the MMO in writing of any failure of the aids to navigation and the timescales and plans for remedying such failures, as soon as possible and no later than 24 hours following the undertaker becoming aware of any such failure.

(5) In the event that the provisions of condition 7(12) are invoked, the undertaker must lay down such buoys, exhibit such lights and take such other steps for preventing danger to navigation as directed by Trinity House.

(6) Any jack up barges or vessels utilised during the licensed activities, when jacked up, must exhibit signals in accordance with the UK Standard Marking Schedule for Offshore Installations.

Colouring of structures

9. The undertaker must colour all structures yellow (colour code RAL 1023) from at least highest astronomical tide to a height directed by Trinity House, or must colour the structure as directed by Trinity House from time to time.

Aviation safety

10.—(1) The undertaker must exhibit such lights, with such shape, colour and character as are required in writing by Air Navigation Order 2016^(a) and determined necessary for aviation safety in consultation with the Defence Infrastructure Organisation Safeguarding and as directed by the Civil Aviation Authority. Lighting installed specifically to meet Ministry of Defence aviation safety requirements must remain operational for the life of the authorised development unless otherwise agreed in writing with the Ministry of Defence.

(2) The undertaker must notify the Defence Infrastructure Organisation Safeguarding, the Civil Aviation Authority and the MMO, at least 14 days prior to the commencement of the licensed activities, in writing of the following information—

- (a) the date of the commencement of licensed activities;
- (b) the date any offshore electrical installations are first used;
- (c) the maximum height of any construction equipment or vessels to be used;
- (d) the maximum heights of any offshore electrical installations to be constructed (including any antennae); and
- (e) the latitude and longitude of each offshore electrical installations to be constructed,

and the Defence Infrastructure Organisation Safeguarding and the Civil Aviation Authority must be notified of any changes to the information supplied under this paragraph of this condition and of the completion of the construction of the authorised project. Copies of notifications must be provided to the MMO within five days of the notification being made.

Chemicals, drilling and debris

11.—(1) Unless otherwise agreed in writing by the MMO all chemicals used in the construction of the authorised project must be selected from the List of Notified Chemicals approved for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002^(b) as maintained by the Centre for Environment, Fisheries and Aquaculture Science.

(2) The undertaker must ensure that any coatings or treatments are suitable for use in the marine environment and are used in accordance with relevant guidelines approved by Health and Safety Executive and the Environment Agency.

(3) The storage, handling, transport and use of fuels, lubricants, chemicals and other substances must be undertaken so as to prevent releases into the marine environment, including bunding of 110% of the total volume of all reservoirs and containers.

(4) The undertaker must inform the MMO of the location and quantities of material disposed of each month under the Order, by submission of a disposal return by 31 January each year for the months August to January inclusive, and by 31 July each year for the months February to July inclusive.

(5) The undertaker must ensure that only inert material of natural origin, produced during the drilling installation of or seabed preparation for foundations, and drilling mud is disposed of within the Order limits seaward of MHWS.

(6) The undertaker must ensure that any rock material used in the construction of the authorised project is from a recognised source, free from contaminants and containing minimal fines.

(7) In the event that any rock material used in the construction of the authorised project is misplaced or lost below MHWS, the undertaker must report the loss to the MMO's Local Office in writing within 48 hours of becoming aware of it and if the MMO in consultation with the MCA and Trinity House, reasonably considers such material to constitute a navigation or environmental hazard (dependent on the size and nature of the material) the undertaker must endeavour to locate the material and recover it at its own expense.

(a) S.I. 2016/765.

(b) S.I. 2002/1355.

(8) The undertaker must ensure that no waste concrete slurry or wash water from concrete or cement works are discharged into the marine environment. Concrete and cement mixing and washing areas should be contained to prevent run off entering the marine environment through the freeing ports.

(9) The undertaker must ensure that any oil, fuel or chemical spill within the marine environment is reported in writing to the MMO, Marine Pollution Response Team in accordance with the marine pollution contingency plan agreed under condition 13(1)(d)(i).

(10) All dropped objects within the Order limits must be reported to the MMO using the dropped object procedure form as soon as reasonably practicable following the undertaker becoming aware of an incident. On receipt of the dropped object procedure form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.

Force majeure

12.—(1) If, due to stress of weather or any other cause the master of a vessel determines that it is necessary to deposit the authorised deposits within or outside of the Order limits because the safety of human life or of the vessel is threatened, within 48 hours full details of the circumstances of the deposit must be notified to the MMO in the manner provided in condition 11(10).

(2) The unauthorised deposits must be removed at the expense of the undertaker unless written approval is obtained from the MMO.

Pre-construction plans and documentation

13.—(1) The licensed activities for each stage of construction of the authorised project must not commence until the following (insofar as relevant to that activity or stage of activity) have been submitted to and approved in writing by the MMO in consultation with, where relevant, Trinity House, the MCA and the UK Hydrographic Office—

- (a) A design plan or plans prepared in accordance with the layout principles at a scale of between 1:25,000 and 1:50,000, or in such other format as may be appropriate, including detailed representation on the most suitably scaled chart, which shows, for the relevant stage—
 - (i) the proposed location, including grid co-ordinates of the centre point of the proposed location for each offshore electrical installation within the relevant stage, subject to any micro-siting required due to anthropological constraints, environmental constraints or difficult ground conditions discovered post approval under this condition and choice of foundation of all offshore electrical installations within the relevant stage;
 - (ii) the height, length and width of all offshore electrical installations (including any antennae) within the relevant stage;
 - (iii) the length and arrangement of all cables comprised in Work Nos. 2, 3, and 5 within the relevant stage;
 - (iv) the dimensions of all monopile foundations, mono suction bucket foundations, jacket foundations, gravity base structures, pontoon gravity base type 1 structures and pontoon gravity base type 2 structures;
 - (v) the proposed layout of all offshore electrical installations including any exclusion zones identified under sub-paragraph 13(2)(d); and
 - (vi) any exclusion zones or micrositing requirements identified in any mitigation scheme pursuant to sub-paragraph 13(2)(d) or relating to any habitats of principal importance identified as part of surveys undertaken in accordance with condition 17, to ensure conformity with the description of Work Nos. 2, 3, 4 and 5 and compliance with conditions 1, 2 and 3 above;

- (b) a construction programme to include details for the relevant stage of—
 - (i) the proposed construction start date;
 - (ii) proposed timings for mobilisation of plant delivery of materials and installation works; and
 - (iii) an indicative written construction programme for all offshore electrical installations and electrical circuits comprised in the works at paragraph 2 of Part 1 (licensed marine activities) of this Schedule (insofar as not shown in sub-paragraph (ii) above),
unless otherwise agreed in writing with the MMO;
- (c) a construction method statement in accordance with the construction methods assessed in the environmental statement and including details for the relevant stage of—
 - (i) foundation installation methodology, including drilling methods and disposal of drill arisings and material extracted during seabed preparation for foundation works and having regard to any mitigation scheme pursuant to sub-paragraph 13(1)(f);
 - (ii) advisory safe passing distances for vessels around construction sites;
 - (iii) cable (including fibre optic cable) installation;
 - (iv) contractors;
 - (v) vessels and vessels transit corridors;
 - (vi) codes of conduct for vessel operators;
 - (vii) associated ancillary works;
 - (viii) guard vessels to be employed;
 - (ix) details of means to address impacts on European sites, habitats of principal importance and any international or nationally designated sites, where relevant; and
 - (x) measures to ensure appropriate co-ordination with the Marine Helicopter Coordination Centre;
- (d) a construction project environmental management and monitoring plan covering the period of construction of the relevant stage to include details of—
 - (i) a marine pollution contingency plan to address the risks, methods and procedures to deal with and report any spills and collision incidents of the authorised project in relation to all activities carried out;
 - (ii) a chemical risk review to include information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance;
 - (iii) a marine biosecurity plan detailing how the risk of introduction and spread of invasive non-native species will be minimised;
 - (iv) waste management and disposal arrangements;
 - (v) a vessel management plan, to determine vessel routing to and from construction sites and ports, to include a code of conduct for vessel operators; and
 - (vi) the appointment and responsibilities of a company fisheries liaison officer;
- (e) a scour protection management plan for the relevant stage providing details of the need, type, sources, quantity and installation methods for scour protection, which plan must be updated and resubmitted in writing for approval if changes to it are proposed following cable laying operations;
- (f) details for the relevant stage of proposed pre-construction surveys, construction monitoring, post-construction monitoring and related reporting in accordance with conditions 17, 18 and 19;
- (g) in the event that driven or part-driven pile foundations are proposed to be used for the relevant stage, a piling marine mammal mitigation protocol for that stage, in accordance with the outline marine mammal mitigation protocol, the intention of which is to prevent

injury to marine mammals, including details of soft start procedures with specified duration periods following current best practice as advised by the relevant statutory nature conservation bodies;

- (h) a cable specification and installation plan for the relevant stage which accords with the principles of the outline cable specification and installation plan, to include—
- (i) technical specification of offshore cables (including fibre optic cable) below MHWS within that stage, including a desk-based assessment of attenuation of electromagnetic field strengths, shielding and cable burial depth in accordance with good industry practice;
 - (ii) a detailed cable laying plan for the Order limits within that stage, incorporating a burial risk assessment encompassing the identification of any cable protection that exceeds 5% of navigable depth referenced to Chart Datum and, in the event that any area of cable protection exceeding 5% of navigable depth is identified, details of any steps (to be determined following consultation with the MCA and Trinity House) to be taken to ensure existing and future safe navigation is not compromised or similar such assessment to ascertain suitable burial depths and cable laying techniques, including cable protection;
 - (iii) proposals for the volume and areas of cable protection to be used for each cable crossing, and proposals for timing and methodology for reporting on actual volumes and areas post construction within that stage; and
 - (iv) proposals for monitoring offshore cables within that stage including cable protection during the operational lifetime of the authorised project which includes a risk based approach to the management of unburied or shallow buried cables;
- (i) an aids to navigation management plan for that stage to be agreed in writing by the MMO following consultation with Trinity House, to include details of how the undertaker will comply with the provisions of condition 8 relating to that stage for the lifetime of the authorised project; and
- (j) in the event that driven or part-driven pile foundations are proposed to be used, the licensed activities, or any relevant stage of those activities must not commence until a site integrity plan for that stage which accords with the principles set out in the outline southern north sea special area of conservation site integrity plan has been submitted in writing to the MMO and the MMO is satisfied that the plan provides such mitigation as is necessary to avoid adversely affecting the integrity (within the meaning of the 2017 Offshore Regulations) of a relevant site, to the extent that harbour porpoise are a protected feature of that site.

(2) Subject to condition 13(3) the licensed activities or any relevant stage of those activities must not commence unless no later than six months prior to the commencement of a relevant stage a marine written scheme of archaeological investigation for the stage of construction has been submitted to and approved by the MMO in writing, in accordance with the outline marine written scheme of investigation, and in accordance with industry good practice, in consultation with the statutory historic body to include—

- (a) details of responsibilities of the undertaker, archaeological consultant and contractor;
- (b) a method statement for further site investigation including any specifications for geophysical, geotechnical and diver or remotely operated vehicle investigations;
- (c) archaeological analysis of survey data, and timetable for reporting, which is to be submitted to the MMO within six months of any survey being completed;
- (d) delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones prior to construction;
- (e) monitoring of archaeological exclusion zones during and post construction;
- (f) a requirement for the undertaker to ensure that a copy of any agreed archaeological report is deposited with the National Record of the Historic Environment, by submitting a Historic England OASIS ('online access to the index of archaeological investigations') form with a digital copy of the report within six months of completion of construction of

the authorised project, and to notify the MMO (and East Riding of Yorkshire Council where the report relates to the intertidal area) that the OASIS form has been submitted to the National Record of the Historic Environment within two weeks of submission;

- (g) a reporting and recording protocol, designed in reference to the Offshore Renewables Protocol for Reporting Archaeological Discoveries as set out by the Crown Estate and reporting of any wreck or wreck material during construction, operation and decommissioning of the authorised project; and
- (h) a timetable for all further site investigations, which must allow sufficient opportunity to establish a full understanding of the historic environment within the offshore Order limits and the approval of any necessary mitigation required as a result of the further site investigations prior to commencement of licensed activities.

(3) Pre-construction archaeological investigations and pre-commencement material operations which involve intrusive seabed works must only take place in accordance with a written scheme of investigation specific to the relevant pre-construction activities (which must accord with the details set out in the outline marine written scheme of investigation) which has been submitted to and approved by the MMO in consultation with the statutory historic body.

(4) In the event that driven or part-driven pile foundations are proposed to be used, the hammer energy used to drive or part-drive monopile foundations must not exceed 5,000kJ and the hammer energy used to drive or part-drive pin pile foundations must not exceed 3,000kJ.

(5) No more than two vessels may be engaged at any time in activities related to piling for the licenced activities. There will only be maximum installation of two piled foundations within a 24-hour period. It is possible for installation of the two piled foundations to occur concurrently i.e. within a 24-hour period at up to two locations within the area of Work No. 3(a) or up to two locations within the array. The two piled foundation locations may also be piled simultaneously.

(6) The licensed activities or any part of those activities must not commence until a fisheries coexistence and liaison plan in accordance with the outline fisheries coexistence and liaison plan has been submitted to and approved by the MMO in writing.

(7) The undertaker must, before submitting any pre-construction plans and documentation required under this condition, provide a copy of the plans and documentation to any other undertaker to whom part of the benefit of this Order has been transferred or leased pursuant to article 5 (benefit of the Order) of the Order.

(8) The undertaker to whom part of the benefit of the Order has been transferred or leased pursuant to article 5 (benefit of the Order) must provide any comments on the plans and documentation to the undertaker within 14 days of receipt.

(9) The undertaker and any other undertaker must participate in liaison meetings as requested from time to time by the MMO in writing in advance and must consider such matters as are determined by the MMO relating to the efficient operation of a deemed marine licence issued under this Order (including as varied or transferred).

14.—(1) Except where otherwise stated or agreed in writing with the MMO, each programme, statement, plan, protocol or scheme required to be approved under condition 13 (save for that required under condition 13(1)(f)) must be submitted for approval at least four months prior to the intended commencement of the relevant stage of the licensed activities, save for the following documents, which must be submitted to the MMO for approval at least six months prior to the intended commencement of the relevant stage of the licenced activities—

- (a) marine written scheme of archaeological investigation pursuant to condition 13(2);
- (b) fisheries coexistence and liaison plan pursuant to condition 13(6);
- (c) design plan pursuant to condition 13(1)(a); and
- (d) cable specification and installation plan pursuant to condition 13(1)(h).

(2) The pre-construction monitoring surveys, construction monitoring, post-construction monitoring and related reporting required under condition 13(1)(f) must be submitted in accordance with the following, unless otherwise agreed in writing with the MMO—

- (a) at least four months prior to the first survey of the relevant stage, detail of any pre-construction surveys and an outline of all proposed monitoring;
- (b) at least four months prior to construction of the relevant stage, detail on construction monitoring; and
- (c) at least four months prior to commissioning of the relevant stage, detail of post-construction (and operational) monitoring.

(3) The MMO must determine an application for consent made under Condition 13 within a period of four months commencing on the date the application is received by the MMO, unless otherwise agreed in writing with the undertaker such agreement not to be unreasonably withheld or delayed.

(4) The licensed activities for the relevant stage must be carried out in accordance with the approved plans, protocols, statements, schemes and details approved under condition 13, unless otherwise agreed in writing by the MMO.

(5) The plans, protocols, statements, scheme and details submitted under condition 13 must ensure that any residual effects fall within the scope of those predicted in the environmental statement.

Offshore safety management

15. No stage of the authorised project may commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and, so far as is applicable to that stage of the authorised project adequately addressed all MCA recommendations as appropriate to the authorised project contained within MGN654 “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes.

Reporting of engaged agents, contractors and vessels

16.—(1) The undertaker must provide the following information to the MMO—

- (a) the name, company number, address and function of any agent, contractor or subcontractor appointed to engage in the licensed activities not less than ten working days prior to such agent or contractor commencing any licensed activity; and
- (b) each week during the construction of the authorised project a list of the vessels currently and to be used in relation to the licensed activities, including the master’s name, vessel IMO number and vessel owner or operating company.

(2) Any changes to the supplied details must be notified to the MMO in writing prior to the agent, contractor or vessel engaging in the licensed activities.

(3) The undertaker must notify the MMO in writing not less than 24 hours prior to the commencement of major component exchanges, ladder replacements or cable related works—

- (a) any agents, contractors or subcontractors that will carry out such works; and
- (b) any vessel proposed to be used for such works, including the master’s name, vessel type, vessel IMO number and vessel owner or operating company.

Pre-construction monitoring and surveys

17.—(1) The undertaker must, in discharging condition 13(1)(f), for each stage of construction submit a monitoring plan or plans for that stage in accordance with an outline marine monitoring plan for written approval by the MMO in consultation with the relevant statutory bodies, which will contain details of proposed surveys, including methodologies and timings, and a proposed format and content for a pre-construction baseline report, and;

- (a) the survey proposals must be in accordance with the principles set out in the outline marine monitoring plan and must specify each survey’s objectives and explain how it will assist in either informing a useful and valid comparison with the post-construction

position or will enable the validation or otherwise of key predictions in the environmental statement; and

- (b) the baseline report proposals must ensure that the outcome of the agreed surveys together with existing data and reports are drawn together to present a valid statement of the preconstruction position, with any limitations, and must make clear what post-construction comparison is intended and the justification for this being required.

(2) Subject to receipt from the undertaker of specific proposals pursuant to this condition the pre-construction surveys must comprise, in outline—

- (a) a full sea floor coverage swath-bathymetry survey that meets the requirements of IHO S44ed5 Order 1a of the Order limits and an appropriate buffer outside to—
 - (i) determine the location, extent and composition of any biogenic or geogenic reef features, as set out within the outline marine monitoring plan;
 - (ii) inform future navigation risk assessments as part of the cable specification and installation plan; and
 - (iii) inform the identification of any archaeological exclusion zone and post consent monitoring of any such archaeological exclusion zone.
- (b) a bathymetric survey that meets the requirements of IHO S44ed5 Order 1a of the area within the following coordinates—

<i>Development area node point</i>	<i>WGS84 UTM Zone 31N (metres)</i>		<i>WGS84 (DMS)</i>		<i>WGS84 (decimal degrees)</i>	
	<i>Easting</i>	<i>Northing</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Latitude</i>	<i>Longitude</i>
1	401818	5992480	54° 4' 16.157" N	1° 29' 58.386" E	54.07115	1.49955
2	411109	5984944	54° 0' 18.479" N	1° 38' 37.320" E	54.00513	1.64370
3	397695	5985627	54° 0' 31.626" N	1° 26' 19.993" E	54.00878	1.43889
4	397800	5978992	53° 56' 57.085" N	1° 26' 33.766" E	53.94919	1.44271
5	387657	5983579	53° 59' 17.868" N	1° 17' 11.556" E	53.98830	1.28654
6	401818	5992480	54° 4' 16.157" N	1° 29' 58.386" E	54.07115	1.49955

(3) The pre-construction survey(s) carried out pursuant to condition 17(2)(a)(ii) and 17(2)(b) must fulfil the requirements of MGN654 and its supporting ‘Hydrographic Guidelines for Offshore Renewable Energy Developer’ (as relevant).

(4) The undertaker must carry out the surveys specified within the monitoring plan or plans in accordance with that plan or plans, unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation body.

(5) Following completion of a survey carried out pursuant to this condition and prior to construction of the relevant stage, the undertaker must provide a report and full density data of the survey outcomes to the MMO, the relevant statutory nature conservation body, the MCA and UK Hydrographic Office (as relevant).

Construction monitoring

18.—(1) The undertaker must in discharging condition 13(1)(f) for each stage of construction submit a construction monitoring plan or plans for that stage in accordance with an outline marine monitoring plan for written approval by the MMO in consultation with the relevant statutory nature conservation body, which will include details of any proposed construction monitoring,

including methodologies and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must be in accordance with the principles set out in the outline marine monitoring plan and must specify each survey's objectives and explain how it will assist in either informing a useful and valid comparison with the pre-construction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

(2) Subject to receipt from the undertaker of specific proposals pursuant to this condition the construction monitoring plan must include in outline details of—

- (a) vessel traffic monitoring by automatic identification system for the duration of the construction period, with provision for a report to be submitted to the MMO, Trinity House, and the MCA annually during the construction period for the authorised development; and
- (b) where piled foundations are to be employed, unless otherwise agreed by the MMO in writing, details of proposed monitoring of the noise generated by the installation of the first four piled foundations of each piled foundation type to be constructed collectively under this licence and the licence granted under Schedule 11 of the Order.

(3) The results of the initial noise measurements monitored in accordance with sub-paragraph 18(2)(b) must be provided in writing to the MMO within six weeks of the installation (unless otherwise agreed) of the first four piled foundations of each piled foundation type. The assessment of this report by the MMO will determine whether any further noise monitoring is required. If, in the opinion of the MMO in consultation with the statutory nature conservation body, the assessment shows impacts significantly in excess to those assessed in the environmental statement and there has been a failure of the mitigations set out in the marine mammal mitigation protocol, all piling activity must cease until an update to the marine mammal mitigation protocol and further monitoring requirements have been agreed.

(4) The undertaker must carry out the surveys specified within the construction monitoring plan or plans in accordance with that plan or plans, including any further noise monitoring required in writing by the MMO under condition 18(3) unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation body.

Post-construction monitoring

19.—(1) The undertaker must in discharging condition 13(1)(f) for each stage of construction submit a post-construction monitoring plan or plans for that stage in accordance with an outline marine monitoring plan for written approval by the MMO in consultation with the relevant statutory nature conservation body including details of proposed post-construction surveys, including methodologies (including appropriate buffers, where relevant) and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must be in accordance with the principles set out in the outline marine monitoring plan and must specify each survey's objectives and explain how it will assist in either informing a useful and valid comparison with the pre-construction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

(2) Subject to receipt of specific proposals the post-construction survey plan or plans must include, in outline—

- (a) details of a survey to determine any change in the location, extent and composition of any biogenic or geogenic reef feature identified in the pre-construction survey in the parts of the offshore Order limits in which construction works were carried out. The survey design must be informed by the results of the pre-construction benthic survey;
- (b) a bathymetric survey to monitor the effectiveness of archaeological exclusion zones. The data will be analysed by an accredited archaeologist as defined in the offshore written scheme of investigation required under condition 13(2);
- (c) vessel traffic monitoring by automatic identification system for a duration of three consecutive years following the completion of construction of the authorised project, unless otherwise agreed in writing by the MMO, with provision for a report to be submitted annually to the MMO, Trinity House, and the MCA; and

- (d) a bathymetry survey of the installed export cable that meets the requirements of IHO S44ed5 Order 1a and MGN654 Annex 4 ‘Hydrography Guidelines for Offshore Renewable Energy Developers’.

(3) The undertaker must carry out the surveys specified within the post-construction monitoring plan or plans in accordance with that plan or plans, and provide the agreed reports in the agreed format unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation body.

(4) Within 12 weeks of completion of any cable repair or replacement works, the undertaker must undertake a post installation survey along the section of cable that has undergone repair or replacement to demonstrate the successful burial of the cable, and submit a report to the MMO on its findings.

Timing of monitoring report

20. Any monitoring report compiled in accordance with the monitoring plans provided under conditions 17, 18 and 19 must be provided to the MMO no later than four months following receipt by the undertaker of the results of the monitoring to which it relates, unless otherwise agreed with the MMO in writing.

Reporting of impact pile driving

21.—(1) Only when driven or part-driven pile foundations are proposed to be used as part of the foundation installation the undertaker must provide the following information to the Marine Noise Registry—

- (a) prior to the commencement of the licensed activities, information on the expected location, start and end dates of impact pile driving to satisfy the Marine Noise Registry’s Forward Look requirements;
- (b) at six month intervals following the commencement of pile driving, information on the locations and dates of impact pile driving to satisfy the Marine Noise Registry’s Close Out requirements; and
- (c) within 12 weeks of completion of impact pile driving, information on the locations and dates of impact pile driving to satisfy the Marine Noise Registry’s Close Out requirements.

(2) The undertaker must notify the MMO in writing of the successful submission of Forward Look or Close Out data pursuant to sub-paragraph (1) above within 7 days of the submission.

(3) For the purpose of this condition “Forward Look” and “Close Out” means the requirements as set out in the UK Marine Noise Registry Information Document Version 1 (July 2015) as amended, updated or superseded from time to time.

HVAC booster station lighting plan

22. The undertaker must ensure that all HVAC booster stations are lit in accordance with the HVAC booster station lighting plan.

Piling restriction

23. In the event that driven or part driven pile foundations are to be used to install Work No. 3, no impact piling may be undertaken between 21st August and 23rd October each year within the area of Work No. 3 as shown on the offshore works plans unless otherwise agreed in writing by the MMO after consultation with the relevant statutory nature conservation body.

Maintenance reporting

24.—(1) An annual maintenance report must be submitted to the MMO in writing within one month following the first anniversary of the date of commencement of operations, and every year thereafter until permanent cessation of operation.

(2) The report must provide a record of the licensed activities as set out in condition 4 during the preceding year, the timing of activities and methodologies used.

(3) Every fifth year, the undertaker must submit to the MMO in writing, within one month of that date, a consolidated maintenance report, which will—

- (a) include a review of licensed activities undertaken during the preceding five years with reference to the reports submitted in accordance with condition 24(1) of this licence;
- (b) reconfirm the applicability of the methodologies and frequencies of the licensable activities permitted by this licence for the remaining duration of this licence.

Stages of construction

25.—(1) The licenced activities must not be commenced until a written scheme setting out the stages of construction of the authorised development seaward of MHWS has been submitted to and approved by the MMO in writing.

(2) The stages of construction referred to in sub-paragraph (1) will not permit the authorised development to be constructed in more than one overall phase.

(3) The scheme must be implemented as approved.

(4) The written scheme referred to in sub-paragraph (1) must be submitted to the MMO in writing four months prior to the planned commencement of the licenced activities.

Completion of construction

26. The undertaker must submit a close out report to the MCA and the UK Hydrographic Office within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following—

- (a) a plan of the layout of installed export and inter-array cables, offshore substations and booster stations; and
- (b) latitude and longitude coordinates of the location of export and inter-array cables, offshore substations and booster stations, provided as Geographical Information System data referenced to WGS84 datum.

Deployment of cable protection

27. Any cable protection authorised under this licence must be deployed within 15 years from the date of the grant of the order unless otherwise agreed by the MMO in writing.

SCHEDULE 13

MODIFICATIONS TO AND AMENDMENTS OF THE DOGGER BANK CREYKE BECK OFFSHORE WIND FARM ORDER 2015

Schedule 12 to the Dogger Bank Creyke Beck Offshore Wind Farm Order 2015

1. After Part 5 of Schedule 12 insert new Part 6—

“PART 6

PROTECTION OF ORSTED HORNSEA PROJECT FOUR LIMITED

Application

1. The following provisions of this Part of this Schedule will have effect unless otherwise agreed in writing between the undertaker and Hornsea Four.

Interpretation

2. In this Part of this Schedule—

“acceptable insurance” means a third party liability insurance effected and maintained by the undertaker to a level of not less than £50,000,000 (fifty million pounds) (or such lower amount as may be agreed by Hornsea Four) per occurrence or series of occurrences arising out of one event. Such insurance shall be maintained for the construction period of the authorised development which constitute specified works and arranged with an internationally recognised insurer of repute operating in the London and worldwide insurance market underwriters whose security/credit rating meets the same requirements as an “acceptable credit provider”, such policy shall include (but without limitation)—

- (a) Hornsea Four as a Co-Insured;
- (b) a cross liabilities clause; and
- (c) contractors’ pollution liability for third party property damage and third party bodily damage arising from a pollution/contamination event with cover of £10,000,000.00 (ten million pounds) per event or £20,000,000.00 (twenty million pounds) in aggregate;

“ground mitigation scheme” means a scheme approved by Hornsea Four (such approval not to be unreasonably withheld or delayed) setting out the necessary measures (if any) for a ground subsidence event;

“ground monitoring scheme” means a scheme for monitoring ground subsidence which sets out the Hornsea Four authorised development which is to be subject to such monitoring, the extent of land to be monitored, the manner in which ground levels are to be monitored, the timescales of any monitoring activities and the extent of ground subsidence which, if exceeded, shall require the undertaker to submit for Hornsea Four’s approval a ground mitigation scheme;

“ground subsidence event” means any ground subsidence identified by the monitoring activities set out in the ground monitoring scheme that has exceeded the level described in the ground monitoring scheme as requiring a ground mitigation scheme; and

“the Hornsea Four authorised development” means the onshore development authorised by the Hornsea Four Order;

“the Hornsea Four Order” means the Hornsea Four Offshore Wind Farm Order 202*;

“the Hornsea Four Order land” has the same meaning as the term “Order land” in article 2(1) of the Hornsea Four Order;

“Hornsea Four” means Orsted Hornsea Project Four Limited, (Company No. 08584182) whose registered office is at 5 Howick Place, London, England, SW1P 1WG or any person having the benefit of the Hornsea Four Order pursuant to article 5 thereof;

“the Order” means this Order;

“the respective authorised developments” means the developments authorised by the Order and the Hornsea Four Order respectively; and

“specified works” means the carrying out of any of the authorised development over, under or within 15 metres of the Hornsea Four authorised development or in the event that the Hornsea Four authorised development has not been constructed within the Hornsea Four Order land.

Regulation of powers over the Hornsea Four Order land

3.—(1) The undertaker may not exercise the powers under any of the articles of the Order specified in sub-paragraph (2) over or in respect of the Hornsea Four Order land otherwise than with the prior written consent of Hornsea Four.

(2) The articles referred to in sub-paragraph (1) are—

- (a) article 13 (street works);
- (b) article 14 (temporary stopping up of streets);
- (c) article 15 (access to works);
- (d) article 17 (discharge of water);
- (e) article 19 (authority to survey and investigate land);
- (k) article 28 (rights under or over streets);
- (l) article 29 (temporary use of land for carrying out authorised project);
- (m) article 30 (temporary use of land for maintaining authorised development); and
- (o) article 36 (felling or lopping of trees and removal of hedgerows).

(3) In the event that Hornsea Four withholds its consent pursuant to sub-paragraph (1) it will notify the undertaker in writing of the reasons for withholding such consent and (if applicable) the time period during which such consent will be withheld.

Co-operation

4. Wherever in this Part of this Schedule provision is made with respect to the approval or consent of Hornsea Four, that approval or consent shall be in writing (and subject to such reasonable terms and conditions as the undertaker may require), but shall not be unreasonably withheld.

5. In the event that Hornsea Four does not respond in writing to a request for approval or consent within 28 days of receipt of such a request, Hornsea Four is deemed to have given its consent (without any terms or conditions).

6. Insofar as the construction of the respective authorised developments is or may be undertaken concurrently, the undertaker shall—

- (a) co-operate with Hornsea Four with a view to ensuring—
 - (i) the co-ordination of construction programming and the carrying out of works; and
 - (ii) that access for the purposes of constructing the respective authorised developments is maintained for the undertaker and Hornsea Four and their respective contractors; and

- (b) use reasonable endeavours to avoid any conflict arising between the carrying out of the respective authorised developments.

7. Insofar as the construction of the authorised development gives rise to the need to modify any scheme secured by a requirement contained in Part 3, Schedule 1 to the Hornsea Four Order, the undertaker will provide such assistance as is reasonably necessary to support Hornsea Four in pursuing any such modification.

Requirements

8. Insofar as compliance with paragraph 3(1) of this Part prevents the undertaker from complying with any requirement contained in Part 2 of Schedule 1 to the Order, the undertaker will not be in breach of such requirement for the time period specified in paragraph 3(3).

9. In the event that paragraph 8 applies, the undertaker will provide the relevant planning authority with a copy of the reasons given by Hornsea Four for refusing consent and the time period pursuant to paragraph 3(3).

10. It will be a defence for any person charged with an offence pursuant to section 161 of the Planning Act 2008 (Breach of terms of order granting development consent) to prove that they were not able to comply with a requirement contained in Part 2 of Schedule 1 to the Order due to the effect of paragraph 3 of this Part.

Protection of Hornsea Four

11.—(1) Not less than 56 days before the commencement of any specified works the undertaker must submit to Hornsea Four a plan and, if reasonably required by Hornsea Four, a ground monitoring scheme in respect of those works.

(2) The plan to be submitted to Hornsea Four under sub-paragraph (1) must include a method statement and describe—

- (a) the exact position of the works;
- (b) the level at which these are proposed to be constructed or renewed;
- (c) the manner of their construction or renewal including details of excavation, positioning of plant etc.;
- (d) the position of all Hornsea Four authorised development;
- (e) by way of detailed drawings, every alteration proposed to be made to or close to any of the Hornsea Four authorised development; and
- (f) any intended maintenance regimes.

(3) The undertaker must not commence any works to which sub-paragraphs (1) and (2) apply until Hornsea Four has given written approval of the plan so submitted.

(4) Any approval of Hornsea Four required under sub-paragraph (3)—

- (a) may be given subject to reasonable conditions for any purpose mentioned in sub-paragraph (5) or (7); and,
- (b) must not be unreasonably withheld.

(5) In relation to a work to which sub-paragraphs (1) and/or (2) apply, Hornsea Four may require such modifications to be made to the plans as may be reasonably necessary for the purpose of securing the Hornsea Four authorised development against interference or risk of damage or for the provision of protective works or for the purpose of providing or securing proper and convenient means of access to any of the Hornsea Four authorised development.

(6) Works to which this paragraph applies must only be executed in accordance with the plan, submitted under sub-paragraphs (1) and (2) or as relevant sub-paragraph (5), as amended from time to time by agreement between the undertaker and Hornsea Four and in

accordance with such reasonable requirements as may be made in accordance with sub-paragraphs (5) and/or (7) by Hornsea Four for the alteration or otherwise for the protection of the Hornsea Four authorised development, or for securing access to it, and Hornsea Four will be entitled to watch and inspect the execution of those works.

(7) Where Hornsea Four requires any protective works to be carried out by itself or by the undertaker (whether of a temporary or permanent nature) such protective works, inclusive of any measures or schemes required and approved as part of the plan approved pursuant to this paragraph, must be carried out to Hornsea Four's satisfaction prior to the commencement of any specified works for which protective works are required and Hornsea Four must give notice of its requirement for such protective works within 42 days of the date of submission of a plan pursuant to this paragraph (except in an emergency).

(8) Nothing in this paragraph shall preclude the undertaker from submitting at any time or from time to time, but in no case less than 56 days before commencing the execution of any specified works, a new plan, instead of the plan previously submitted, and having done so the provisions of this paragraph will apply to and in respect of the new plan.

(9) The undertaker will not be required to comply with sub-paragraph (1) where it needs to carry out emergency works as defined in the 1991 Act but in that case it must give to Hornsea Four notice as soon as is reasonably practicable and a plan of those works and must—

- (a) comply with sub-paragraphs (5), (6) and (7) insofar as is reasonably practicable in the circumstances; and
- (b) comply with sub-paragraph (10) at all times.

(10) As soon as reasonably practicable after any ground subsidence event attributable to the authorised development the undertaker shall implement an appropriate ground mitigation scheme save that Hornsea Four retains the right to carry out any further necessary protective works for the safeguarding of its apparatus and can recover any such costs in line with paragraph 12.

Expenses

12. Save where otherwise agreed in writing between Hornsea Four and the undertaker and subject to the following provisions of this paragraph, the undertaker must pay to Hornsea Four within 30 days of receipt of an itemised invoice or claim from Hornsea all charges, costs and expenses reasonably incurred by Dogger Bank in, or in connection with this Part of this Schedule including without limitation—

- (a) the carrying out of protective works, plus a capitalised sum to cover the cost of maintaining and renewing permanent protective works;
- (b) the survey of any land, apparatus or works, the inspection and monitoring of works or the installation or removal of any temporary works reasonably necessary in consequence of the execution of any such works referred to in this Part of this Schedule.

Indemnity

13.—(1) Subject to sub-paragraphs (2) and (3), if by reason or in consequence of the construction of any works authorised by this Part of this Schedule or in consequence of the construction, use, maintenance or failure of any of the onshore elements of the authorised development by or on behalf of the undertaker or in consequence of any act or default of the undertaker (or any person employed or authorised by him) in the course of carrying out the onshore elements of the authorised development (including without limitation works carried out by the undertaker under this Part of this Schedule or any subsidence resulting from any of these works), any damage is caused to any apparatus or property of Hornsea Four, or there is any interruption in any service provided, or in the supply of any goods, by Hornsea Four, or Hornsea Four becomes liable to pay any amount to any third party, the undertaker will—

- (a) bear and pay on demand accompanied by an invoice or claim from Hornsea Four the cost reasonably and properly incurred by Hornsea Four in making good such damage or restoring the supply; and
- (b) indemnify Hornsea Four for any other expenses, loss, demands, proceedings, damages, claims, penalty or costs incurred by or recovered from Hornsea Four, by reason or in consequence of any such damage or interruption or Hornsea Four becoming liable to any third party as aforesaid other than arising from any default by Hornsea Four.

(2) The fact that any act or thing may have been done by Hornsea Four on behalf of the undertaker or in accordance with a plan approved by Hornsea Four or in accordance with any requirement of Hornsea Four as a consequence of the onshore elements of the authorised development or under its supervision will not (unless sub-paragraph (3) applies), excuse the undertaker from liability under the provisions of this sub-paragraph (2) where the undertaker fails to carry out and execute the works properly with due care and attention and in a skilful and workman like manner or in a manner that does not accord with the approved plan or as otherwise agreed between the undertaker and Hornsea Four.

(3) Nothing in sub-paragraph (1) shall impose any liability on the undertaker in respect of any damage or interruption to the extent that it is attributable to the neglect or default of Hornsea Four, its officers, servants, contractors or agents.

(4) Hornsea Four must give the undertaker reasonable notice of any such claim or demand and no settlement, admission of liability or compromise or demand must be made, unless payment is required in connection with a statutory compensation scheme without first consulting the undertaker and considering its representations.

(5) Hornsea Four must use its reasonable endeavours to mitigate in whole or in part and to minimise any costs, expenses, loss, demands and penalties to which the indemnity under sub-paragraph (1) applies. If request to do so by the undertaker, Hornsea Four must provide an explanation of how the claim has been minimised. The undertaker is only liable under sub-paragraph (1) for claim reasonably incurred by Hornsea Four.

(6) The undertaker must not commence construction (and must not permit the commencement of such construction) of any specified works until Hornsea Four is satisfied acting reasonably (but subject to all necessary regulatory constraints) that the undertaker or its contractor has procured acceptable insurance (and provided evidence to Hornsea Four that it shall maintain such acceptable insurance for the construction period of the specified works from the proposed date of commencement of construction of the specified works) and Hornsea Four has confirmed the same in writing to the undertaker.

(7) In the event that the undertaker fails to comply with paragraph 13(6) of this Part of this Schedule, nothing in this Part of this Schedule shall prevent Hornsea Four from seeking injunctive relief (or any other equitable remedy) in any court of competent jurisdiction.

Arbitration

14.—(1) Any difference or dispute arising between the undertaker and Hornsea Four under this Part of this Schedule shall, unless otherwise agreed in writing between the undertaker and Hornsea Four, be referred to and settled in arbitration in accordance with the Rules at Schedule 14 of the Hornsea Four Order, by a single arbitrator to be agreed upon by the parties within 14 days of receipt of the notice of arbitration, or if the parties fail to agree within the time period stipulated, to be appointed on application of either party (after giving written notice to the other) by the Secretary of State.

(2) Should the Secretary of State fail to appoint an arbitrator under paragraph (1) within 14 days of the application, the referring party may refer to the Centre of Effective Dispute Resolution for appointment of an arbitrator.

(3) Article 4439 (arbitration) will not apply to any difference or dispute under any provision of this Part of this Schedule.

Access

15. If in consequence of any specified works approved in accordance with this Part or the powers granted under this Order the access to any apparatus is materially obstructed, the undertaker must provide such alternative means of access to such apparatus as will enable Hornsea Four to maintain or use the apparatus no less effectively than was possible before such obstruction.”

SCHEDULE 14

ARBITRATION RULES

Primary objective

1.—(1) The primary objective of these Arbitration Rules is to achieve a fair, impartial, final and binding award on the substantive difference between the parties (save as to costs) within 4 months from the date the arbitrator is appointed pursuant to article 39 of the Order.

(2) The parties will first use their reasonable endeavours to settle a dispute amicably through negotiations undertaken in good faith by the senior management of the parties. Any dispute which is not resolved amicably by the senior management of the parties within twenty (20) working days of the dispute arising, or such longer period as agreed in writing by the parties, will be subject to arbitration in accordance with the terms of this Schedule.

(3) The Arbitration will be deemed to have commenced when a party (“the Claimant”) serves a written notice of arbitration on the other party (“the Respondent”).

Time periods

2.—(1) All time periods in these Arbitration Rules will be measured in working days and this will exclude weekends, bank holidays and public holidays.

(2) Time periods will be calculated from the day after the arbitrator is appointed which will be either—

- (a) the date the arbitrator notifies the parties in writing of his/her acceptance of an appointment by agreement of the parties; or
- (b) the date the arbitrator is appointed by the Secretary of State.

Timetable

3.—(1) The timetable for the arbitration will be that set out in sub-paragraphs (2) to (4) below unless amended in accordance with paragraph 5(3).

(2) Within 15 days of the arbitrator being appointed, the Claimant will provide both the Respondent and the arbitrator with—

- (a) a written Statement of Claim which describes the nature of the difference between the parties, the legal and factual issues, the Claimant’s contentions as to those issues, and the remedy it is seeking; and
- (b) all statements of evidence and copies of all documents on which it relies, including contractual documentation, correspondence (including electronic documents), legal precedents and expert witness reports.

(3) Within 15 days of receipt of the Claimant’s statements under sub-paragraph (2) by the arbitrator and Respondent, the Respondent will provide the Claimant and the arbitrator with—

- (a) a written Statement of Defence responding to the Claimant’s Statement of Claim, its statement in respect of the nature of the difference, the legal and factual issues in the Claimant’s claim, its acceptance of any element(s) of the Claimant’s claim, its contentions as to those elements of the Claimant’s claim it does not accept;
- (b) all statements of evidence and copies of all documents on which it relies, including contractual documentation, correspondence (including electronic documents), legal precedents and expert witness reports; and
- (c) any objections it wishes to make to the Claimant’s statements, comments on the Claimant’s expert report(s) (if submitted by the Claimant) and explanations for the objections.

(4) Within 5 days of the Respondent serving its statements sub-paragraph (3), the Claimant may make a Statement of Reply by providing both the Respondent and the arbitrator with—

- (a) a written statement responding to the Respondent's submissions, including its reply in respect of the nature of the difference, the issues (both factual and legal) and its contentions in relation to the issues;
- (b) all statements of evidence and copies of documents in response to the Respondent's submissions;
- (c) any expert report in response to the Respondent's submissions;
- (d) any objections to the statements of evidence, expert reports or other documents submitted by the Respondent; and
- (e) its written submissions in response to the legal and factual issues involved.

Procedure

4.—(1) The arbitrator will make an award on the substantive difference(s) based solely on the written material submitted by the parties unless the arbitrator decides that a hearing is necessary to explain or resolve any matters.

(2) Either party may, within 2 days of delivery of the last submission, request a hearing giving specific reasons why it considers a hearing is required.

(3) Within 5 days of receiving the last submission, the arbitrator will notify the parties whether a hearing is to be held and the length of that hearing.

(4) Within 10 days of the arbitrator advising the parties that he will hold a hearing, the date and venue for the hearing will be fixed by agreement with the parties, save that if there is no agreement the arbitrator will direct a date and venue which he considers is fair and reasonable in all the circumstances. The date for the hearing will not be less than 35 days from the date of the arbitrator's direction confirming the date and venue of the hearing.

(5) A decision will be made by the arbitrator on whether there is any need for expert evidence to be submitted orally at the hearing. If oral expert evidence is required by the arbitrator, then any expert(s) attending the hearing may be asked questions by the arbitrator.

(6) There will be no process of examination and cross-examination of experts, but the arbitrator will invite the parties to ask questions of the experts by way of clarification of any answers given by the expert(s) in response to the arbitrator's questions. Prior to the hearing the procedure for the expert(s) will be that—

- (a) at least 20 days before a hearing, the arbitrator will provide a list of issues to be addressed by the expert(s);
- (b) if more than one expert is called, they will jointly confer and produce a joint report or reports within 10 days of the issues being provided; and
- (c) the form and content of a joint report will be as directed by the arbitrator and must be provided at least 5 days before the hearing.

(7) Within 10 days of a hearing or a decision by the arbitrator that no hearing is to be held the Parties may by way of exchange provide the arbitrator with a final submission in connection with the matters in dispute and any submissions on costs. The arbitrator will take these submissions into account in the award.

(8) The arbitrator may make other directions or rulings as considered appropriate in order to ensure that the parties comply with the timetable and procedures to achieve an award on the substantive difference within 4 months of the date on which they are appointed, unless both parties otherwise agree to an extension to the date for the award.

(9) If a party fails to comply with the timetable, procedure or any other direction then the arbitrator may continue in the absence of a party or submission or document, and may make a decision on the information before them attaching the appropriate weight to any evidence submitted beyond any timetable or in breach of any procedure and/or direction.

(10) The arbitrator's award will include reasons. The parties will accept that the extent to which reasons are given will be proportionate to the issues in dispute and the time available to the arbitrator to deliver the award.

Arbitrator's powers

5.—(1) The arbitrator has all the powers of the Arbitration Act 1996(a), including the non-mandatory sections, save where modified by these Arbitration Rules.

(2) There will be no discovery or disclosure, except that the arbitrator will have the power to order the parties to produce such documents as are reasonably requested by another party no later than the Statement of Reply, or by the arbitrator, where the documents are manifestly relevant, specifically identified and the burden of production is not excessive. Any application and orders should be made by way of a Redfern Schedule without any hearing.

(3) Any time limits fixed in accordance with this procedure or by the arbitrator may be varied by agreement between the parties, subject to any such variation being acceptable to and approved by the arbitrator. In the absence of agreement, the arbitrator may vary the timescales and/or procedure—

- (a) if the arbitrator is satisfied that a variation of any fixed time limit is reasonably necessary to avoid a breach of the rules of natural justice and then;
- (b) only for such a period that is necessary to achieve fairness between the parties.

(4) On the date the award is made, the arbitrator will notify the parties that the award is completed, signed and dated, and that it will be issued to the parties on receipt of cleared funds for the arbitrator's fees and expenses.

Costs

6.—(1) The costs of the Arbitration will include the fees and expenses of the arbitrator, the reasonable fees and expenses of any experts and the reasonable legal and other costs incurred by the parties for the Arbitration.

(2) Subject to sub-paragraph (3), the arbitrator will award recoverable costs on the general principle that each party should bear its own costs.

(3) The arbitrator may depart from the general principle in sub-paragraph (2) and make such other costs award as it considers reasonable where a party has behaved unreasonably as defined within the National Planning Practice Guidance or such other guidance as may replace it.

Confidentiality

7.—(1) Subject to sub-paragraphs (2) and (3), any arbitration hearing and documentation will be open to and accessible by the public.

(2) The arbitrator may direct that the whole or part of a hearing is to be private or any documentation to be confidential where it is necessary in order to protect commercially sensitive information.

(3) Nothing in this paragraph will prevent any disclosure of a document by a party pursuant to an order of a court in England and Wales or where disclosure is required under any enactment.

(a) 1996 c.23.

SCHEDULE 15
DOCUMENTS TO BE CERTIFIED

PART 1

DOCUMENTS FORMING THE ENVIRONMENTAL STATEMENT TO BE CERTIFIED

<i>(1)</i> <i>Application Document No.</i>	<i>(2)</i> <i>Examination Library Reference</i>	<i>(3)</i> <i>Document Description</i>	<i>(4)</i> <i>Version</i>	<i>(5)</i> <i>Date</i>
A1, A2 and A3	APP-006 to APP-034	The environmental statement	1	8 October 2021
A4	APP-035 to APP-066	Figures	1	8 October 2021
A5 and A6	APP-067 to APP-128	Technical Appendices	1	8 October 2021

PART 2

EXAMINATION DOCUMENTS FORMING PART OF THE ENVIRONMENTAL STATEMENT TO BE CERTIFIED

<i>(1)</i> <i>Application Document No. (and relevant ES Chapters)</i>	<i>(2)</i> <i>Examination Library Reference (and relevant ES Chapter reference)</i>	<i>(3)</i> <i>Document Description</i>	<i>(4)</i> <i>Version</i>	<i>(5)</i> <i>Date</i>
A2.2	REP7-0[XX]	Benthic and Intertidal Ecology	2	10 August 2022
A5.2.1.1	REP7-0[XX]	Benthic Intertidal Ecology Technical Report	2	10 August 2022
A2.6	REP5-004	Commercial Fisheries	2	20 June 2022
A4.4.4	REP6-004	Dredging and disposal site	2	27 July 2022
A3.3.1	AS-008	Ecology and Nature Conservation Schedule of Change	1	17 January 2022
A1.5.1	AS-007	Environmental Impact Assessment Methodology Schedule of Change	1	17 January 2022
G1.2	AS-020	Environmental Risk Assessment of the Onshore Substation and Energy Balancing Infrastructure	1	17 January 2022
A6.4.1	REP5-010	Landscape and visual resources wireframes and photomontages	2	20 June 2022

A5.7.1	REP4-009	Navigational risk assessment part 1	2	10 May 2022
A5.7.1	REP4-011	Navigational risk assessment part 2	2	10 May 2022
A5.7.1	REP4-013	Navigational risk assessment part 3	2	10 May 2022
A5.11.1	REP3-005	Offshore installation interfaces part 1	2	21 April 2022
A5.11.1	REP2-059	Offshore installation interfaces part 2	2	29 March 2022
A5.5.2	REP2-003	Offshore ornithology displacement analysis	2	29 March 2022
A5.5.5.1	AS-010	Offshore Ornithology Migratory Birds report Schedule of Change	1	17 January 2022
G5.25	REP6-028	Ornithology Environmental Impact Assessment (EIA) and Habitats Regulation Assessment (HRA) Revision 2	3	27 July 2022
A4.4.8	REP6-006	Pro-rata Annex Revision 4	4	27 July 2022
NTS1.1.1	AS-022	Response to post-Acceptance s51 advice: NTS1.1.1 Non Technical Summary of Schedule of Change	1	17 January 2022
G5.9	REP5a-009	Revised Ornithology Baseline Revision 2	2	4 July 2022
A2.7	REP5-006	Shipping and Navigation	2	20 June 2022
A1.4	REP7-0[XX]	Volume A4 Chapter 4: Project Description Revision 7	7	10 August 2022

PART 3

OTHER DOCUMENTS TO BE CERTIFIED

<i>(1)</i> <i>Examination Library Reference</i>	<i>(2)</i> <i>Document Name</i>	<i>(3)</i> <i>Version</i>	<i>(4)</i> <i>Date</i>
APP-213	the access to works plan	1	8 October 2021
REP7-0[XX]	the book of reference	4	10 August 2022
REP5-084	the Bridge protected area plan	1	20 June 2022
REP6-008	the commitments register	3	27 July 2022
APP-221	the crown land plans – onshore and offshore	1	8 October 2021
REP2-057	the Endurance protective provisions plan	1	29 March 2022
REP7-0[XX]	Harbour protective provisions plan	1	10 August 2022

APP-252	the HVAC booster station lighting plan	1	8 October 2021
REP7-0[XX]	the Johnston protective provisions plan	1	10 August 2022
REP5-016	the kittiwake compensation plan	2	20 June 2022
APP-210	the land plans	1	8 October 2021
REP5-008	the layout principles	3	20 June 2022
APP-206	the location plans – Offshore	1	8 October 2021
APP-207	the location plans - Onshore	1	8 October 2021
REP7-0[XX]	the Neo protective provisions plan	1	10 August 2022
APP-208	the offshore Order limits and grid coordinates plan	1	8 October 2021
REP5-037	the offshore works plans	2	20 June 2022
APP-040	the onshore crossing schedule	1	8 October 2021
APP-209	the onshore Order limits plan	1	8 October 2021
REP5-038	the onshore works plans	2	20 June 2022
REP6-013	the outline cable specification and installation plan	3	27 July 2022
REP4-019	the outline code of construction practice	3	10 May 2022
REP4-019	the outline construction traffic management plan	3	10 May 2022
REP4-021	the outline design plan	2	10 May 2022
REP1-029	the outline ecological management plan	2	8 March 2022
APP-253	the outline employment and skills plan	1	8 October 2021
REP2-029	the outline energy balancing infrastructure HazID report	2	29 March 2022
APP-249	the outline enhancement strategy	1	8 October 2021
REP1-033	the outline fisheries coexistence and liaison plan	2	8 March 2022
REP3-010	the outline landscape management plan	4	21 April 2022
REP6-011	the outline marine mammal mitigation protocol	2	27 July 2022
REP7-0[XX]	the outline marine monitoring plan	7	10 August 2022
REP5-042	the outline marine written scheme of investigation	2	20 June 2022
APP-251	the outline net gain strategy	1	8 October 2021
APP-241	the outline onshore infrastructure drainage strategy	1	8 October 2021
REP5a-007	the outline operations and maintenance plan	2	4 July 2022
APP-254	the outline ornithological monitoring plan	1	8 October 2021
REP7-0[XX]	the outline southern north sea special area	2	10 August

	of conservation site integrity plan		2022
REP3-012	the outline written scheme of investigation for onshore archaeology	2	21 April 2022
REP8-0[XX]	the Perenco protective provisions plan	1	18 August 2022
APP-215	the public rights of way plan	1	8 October 2021
APP-214	the streets plan	1	8 October 2021
APP-220	the tree preservation order and hedgerow plan	1	8 October 2021

SCHEDULE 16
COMPENSATION TO PROTECT THE COHERENCE OF THE
NATIONAL SITE NETWORK

PART 1
KITTIWAKE COMPENSATION

1. In this Schedule—

“Defra” means the Department for Environment, Food and Rural Affairs;

“the FFC” means the site designated as the Flamborough and Filey Coast Special protection Area;

“KCIMP” means the kittiwake compensation implementation and monitoring plan for the delivery of measures to compensate for the predicted loss of adult kittiwakes from the FFC as a result of the authorised development;

“the Hornsea Four Offshore Ornithology Engagement Group” or “H4 OOEG” means the group that will assist, through consultation, the undertaker in the delivery of the compensation measures identified in the kittiwake compensation plan;

“the kittiwake compensation plan” means the document certified as the kittiwake compensation plan by the Secretary of State for the purposes of this Order under article 38 (certification of plans and documents etc.);

“the Marine Recovery Fund” means the fund operated by Defra pursuant to the Offshore Wind Environmental Improvement Package of the British Energy Security Strategy (April 2022) for the implementation of strategic compensation or any equivalent fund established for that purpose;

“the offshore compensation measure” means the offshore nesting structure; and

“the onshore compensation measure” means the onshore nesting structure.

2. Work Nos. 1, 2, 3, 4 and 5 together with any associated development offshore may not be commenced until a plan for the work of the H4 OOEG has been submitted to and approved by the Secretary of State, such plan to include—

- (a) terms of reference of the H4 OOEG;
- (b) details of the membership of the H4 OOEG which must include—
 - (i) the MMO and the relevant statutory nature conservation body as core members for the offshore compensation measure;
 - (ii) the relevant local planning authority and statutory nature conservation body as core members for the onshore compensation measure;
 - (iii) the RSPB and The Wildlife Trust as advisory members, for both the onshore compensation measure and/or the offshore compensation measure subject to their area of expertise;
- (c) details of the proposed schedule of meetings, timetable for preparation of the KCIMP and reporting and review periods;
- (d) the dispute resolution mechanism and confidentiality provisions; and
- (e) the scope of work to be limited to the topics for discussion as identified by the appointed chair to include in relation to the compensation measure, monitoring and adaptive management.

3. Following consultation with the H4 OOEG, the KCIMP must be submitted to the Secretary of State for approval in consultation with the MMO and relevant statutory nature conservation body for the offshore compensation measure (if required), and with the relevant local planning authority and relevant statutory nature conservation body for the onshore compensation measure (if required). The KCIMP must be based on the strategy for kittiwake compensation set out in the kittiwake compensation plan and include—

- (a) details of the locations where the compensation measure will be delivered, and in the event an onshore structure is required, details of landowner agreement(s) and in the event an offshore structure is required, details of any relevant seabed agreement(s);
- (b) details of the design of the artificial nesting structure; including the projected number of nests that will be accommodated on the structure, and how risks from avian or mammalian predation and for an onshore nesting structure how unauthorised human access will be mitigated;
- (c) an implementation timetable for delivery of the artificial nesting structure, such timetable to ensure that the structure is in place to allow for at least three full kittiwake breeding seasons prior to operation of any turbine forming part of the authorised development. For the purposes of this paragraph each breeding season is assumed to have commenced on 1st April in each year and ended on 31st August;
- (d) details of the maintenance schedule for the artificial nesting structure;
- (e) details for the proposed ongoing monitoring of the measure including—
 - (i) survey methods;
 - (ii) survey programmes; and
 - (iii) colony and productivity counts;
- (f) recording of H4 OOEG consultations and project reviews;
- (g) details of any adaptive management measures, with details of the factors used to trigger any such measures;
- (h) provision for reporting to the Secretary of State, to include details of the use of the structure by breeding kittiwake to identify barriers to success and target any adaptive management measures; and
- (i) provision for the undertaker to elect, subject to the approval of the Secretary of State in consultation with the H4 OOEG, to pay a contribution (in addition to the sum stipulated in Part 3 of this Schedule) to the Marine Recovery Fund wholly or partly in substitution for the onshore compensation measure and/or the offshore compensation measure or as an adaptive management measure for the purposes of paragraph 3(1)(g) of this Part of this Schedule. The sum of the contribution to be agreed between the undertaker and Defra in consultation with the OOEG and included in the KCIMP.

4. Paragraphs 5, 6 and 7 of this Part of this Schedule shall not apply to the extent that a contribution to the Marine Recovery Fund has been elected in substitution for the onshore compensation measure and/or the offshore compensation measure for the purposes of paragraph 3(i) of this Part of this Schedule.

5. The undertaker must construct the artificial nesting structure as set out in the KCIMP approved by the Secretary of State.

6. The undertaker must notify the Secretary of State of completion of construction of the artificial nesting structure as set out in the KCIMP.

7. The artificial nesting structure must not be decommissioned without prior written approval of the Secretary of State in consultation with relevant statutory nature conservation body.

8. The KCIMP approved under this Schedule includes any amendments that may subsequently be approved in writing by the Secretary of State. Any amendments to or variations of the approved KCIMP must be in accordance with the principles set out in the kittiwake compensation plan and may only be approved where it has been demonstrated to the satisfaction of the Secretary of State

that it is unlikely to give rise to any materially new or materially different environmental effects from those considered in the kittiwake compensation plan.

PART 2

FISH HABITAT ENHANCEMENT

1. No turbine forming part of the authorised development may begin operation until arrangements for the implementation of the fish habitat enhancement measures have been put in place in accordance with the principles set out in the KCIMP.

PART 3

CONTRIBUTION TO MARINE RECOVERY FUND

1. To the extent a fund has been established, no turbine forming part of the authorised development may begin operation until the undertaker has paid the sum of £500,000 (five hundred thousand pounds) to the Marine Recovery Fund.

EXPLANATORY NOTE

(This note is not part of the Order)

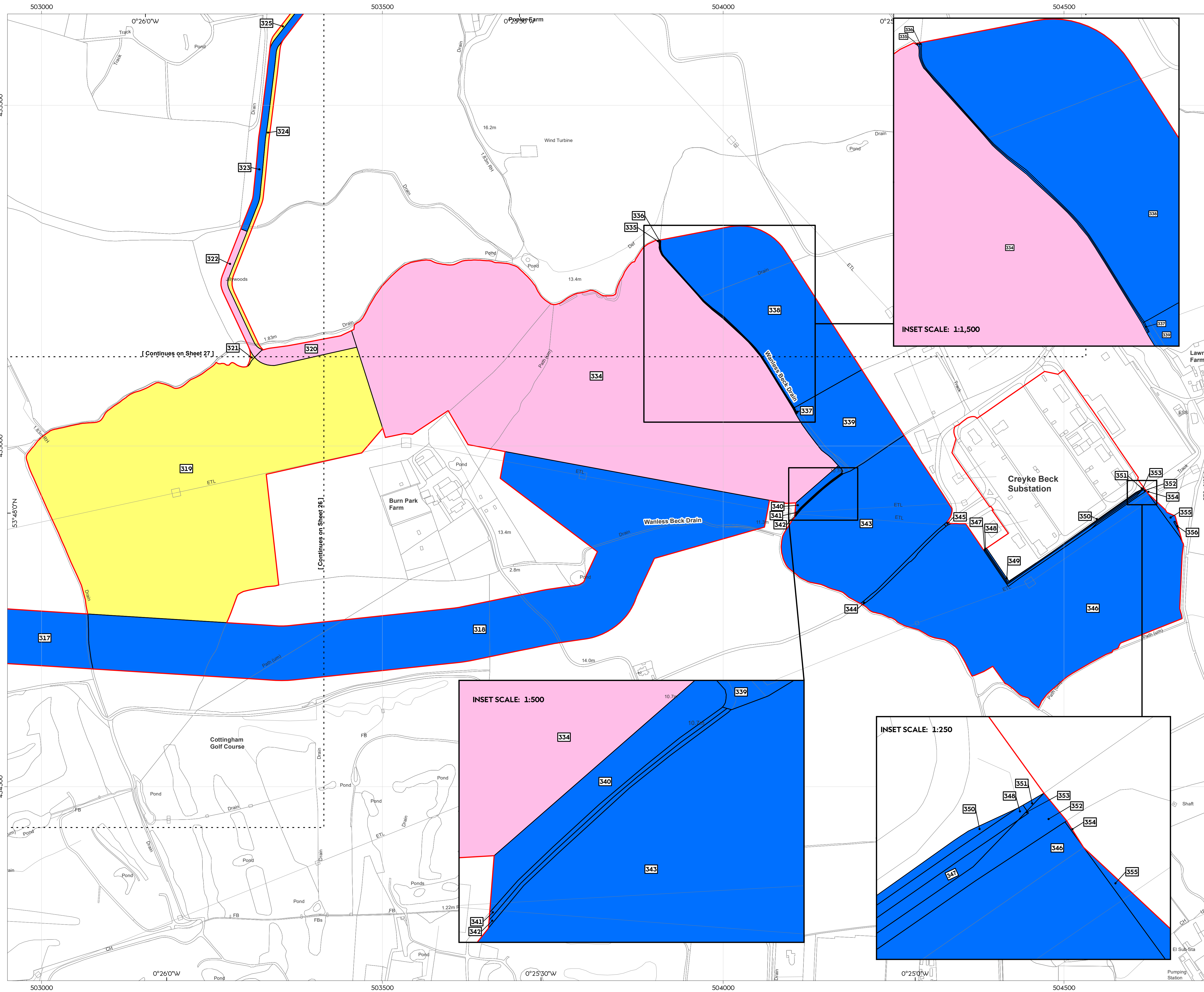
This Order grants development consent for, and authorises the construction, operation and maintenance of an offshore wind farm generating station located in the North Sea 69 kilometres due east of Flamborough Head at its closest point together with associated development including an energy storage facility. This Order imposes requirements in connection with the development and authorises the compulsory purchase of land (including rights in land) and the right to use land and to override easements and other rights.

This Order also grants deemed marine licences under Part 4 of the Marine and Coastal Access Act 2009 in connection with the wind farm. The marine licences impose conditions in connection with the deposits and works for which they grant consent.

A copy of the plans and book of reference referred to in this Order and certified in accordance with article 38 (certification of plans and documents, etc.) together with a copy of any guarantee or alternative form of security approved by the Secretary of State pursuant to article 45 (funding), may be inspected free of charge at the offices of East Riding of Yorkshire Council at County Hall, Beverley, East Riding of Yorkshire, HU17 9BA.

Appendix A.6

*This appendix has been produced to support the Applicant's response to the Examining Authority's Fourth Written Questions – Q4.8.2.1(d). This document should be read alongside **The Applicant's Responses to the Examining Authority's Fourth Written Questions** [document reference 21.5]*



Hornsea Project Four Offshore Wind Farm Land Plan - Onshore Sheet 28 of 28

APFP Regulations Reference : 5(2)(f) Application Document Number : D1.3.1

Order Limits

New rights (including restrictions) to be compulsorily acquired and temporary use of land and in relation to which it is proposed to suspend or extinguish easements, servitudes and other private rights
317; 318; 323; 335; 336; 337; 338; 339; 340; 341; 342; 343; 344; 345; 346; 347; 348; 349; 350; 351; 352; 353; 354; 355; 356

Temporary use of land and in relation to which it is proposed to temporarily suspend easements, servitudes and other private rights
319; 321; 324; 325

Freehold to be compulsorily acquired and temporary use of land and in relation to which it is proposed to extinguish easements, servitudes and other private rights
320; 322; 334

INSET SCALE: 1:1,500

INSET SCALE: 1:500

INSET SCALE: 1:250

Source:
Service Layer Credits: Contains OS data © Crown Copyright and database right 2021.
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Coordinate system: British National Grid
Vertical reference: ODN
Scale @ A1: 1:2,500

0 20 40 80 Metres

0 25 50 100 Yards

↑ N
GRID
NORTH

REV	Revised	DATE
	First Issue for DCO	12/08/2021

Land Plan - Onshore
Document no: HOW040238
Created by: PR
Checked by: IM/OK
Accepted by: KELLY
Approved by: JAMIB

Appendix A.7

*This appendix has been produced to support the Applicant's response to the Examining Authority's Fourth Written Questions – Q4.21. This document should be read alongside **The Applicant's Responses to the Examining Authority's Fourth Written Questions** [document reference 21.5]*

Appendix A.7 Joint Position Statement with Perenco

1 Comparison of Perenco and the Applicant's Analysis of the Impact of DEP on Helicopter Operations to Waveney.

1.1 Meteorological conditions

- The Applicant and Perenco are in broad agreement as to the classification of meteorological conditions based on historic data. Table 1 below present this. The Applicant has split the data by year [REP4-039] whereas Perenco have provided a single figure [REP6-035].

Table 1.1 Equinor and Perenco classification of historic meteorological data for VMC, IMC usable and IMC no-fly.

Current CAA Limits	2020	2021	2022	Perenco [REP6-035]
Day VMC	92.3%	94.5%	95.4%	94% ¹
Day IMC (usable)	3.1%	3.6%	1.5%	2% ¹
Day IMC (no-fly)	4.6%	1.9%	3.1%	4% ¹
Future CAA Limits				
Day VMC	90.8%	93.3%	94.7%	94% ²
Day IMC (usable)	4.6%	4.8%	2.2%	2% ²
Day IMC (no-fly)	4.6%	1.9%	2.2%	4% ²

- N.B. Perenco have the same percentages for conditions under both current and future Civil Aviation Authority (CAA) limits. Perenco do not believe the future CAA limits will apply unless new wind turbines are placed closer than 3nm (assuming dispensation for the existing Dudgeon Wind Farm turbines which has one wind turbine at 2.7nm from the Waveney platform).
- Both the Applicant and Perenco agree that with the Dudgeon Extension Project (DEP) wind turbines being within 3nm, helicopter access would no longer be possible under instrument meteorological conditions (IMC) useable flight weather.

1.2 Impact of loss of Day usable IMC on accessing the Waveney platform

- The next step is calculating how the loss of useable IMC impacts flights to and from the Waveney platform. This step takes account for daily return flights and the weather windows in which Perenco typically access the Waveney platform. This is a step where the Applicant and Perenco have taken diverging methodologies and a side-by-side comparison of the numbers is not possible.

¹ Perenco: Comparative tables of information regarding helicopter access - Current Rules [REP6-035]

² Perenco: Comparative tables of information regarding helicopter access - With Proposed CAA Limitations near windfarms [REP6-035]

5. The applicant has looked at historical flight data and coupled it with the meteorological data to identify flights that would have historically been impacted, had DEP wind turbines been present.
6. Perenco have applied weather windows to the historical metrological data to calculate further reduced access percentages.

1.3 Perenco calculation of access reduction

7. Perenco have taken the historical meteorological data above and applied further logistical restrictions, based on extensive operational experience.
8. For access to Waveney platform:
 - a 2hr window of suitable conditions; and
 - requirement for 2 flights within the available day with at least 5hrs between them
9. For access to a non-production installation (NPI):
 - 2hr window of suitable conditions is assumed necessary for a flight to leave Norwich
10. The further restriction has been placed on the available visual meteorological conditions (VMC) and IMC usable flight times in the meteorological data record. The percentage with no wind turbines represents the base case. The percentages for wind turbines greater than 1.26nm away represents access in day VMC only (loss of usable day IMC). The percentages for wind turbines less than 1.01nm represent the remaining access after the loss of day usable IMC and the loss of VMC access where only the small percentage of time when an east-west approach would be possible.

Table 1.2 Perenco calculation for Daylight Access

Operations possible at Waveney NUI	No Wind Turbines	With Wind Turbine Rotor Tips >1.26nm	With Wind Turbine Rotor Tips <1.01nm
January	65%	61%	6%
February	61%	54%	6%
March	62%	55%	4%
April	77%	75%	2%
May	78%	73%	3%
June	78%	73%	2%
July	72%	67%	2%
August	77%	75%	3%
September	74%	71%	4%
October	71%	66%	2%
November	66%	62%	3%
December	60%	54%	2%
Annual average	71%	67%	3%

Table 1.3 Perenco calculation for non-production installation access (day and night access)

Operations possible at NPI	No Wind Turbines	With Wind Turbine Rotor Tips >1.26nm	With Wind Turbine Rotor <1.01nm
January	92%	65%	7%

Operations possible at NPI	No Wind Turbines	With Wind Turbine Rotor Tips >1.26nm	With Wind Turbine Rotor <1.01nm
February	80%	64%	8%
March	76%	64%	5%
April	91%	89%	4%
May	91%	86%	6%
June	91%	86%	4%
July	91%	79%	5%
August	85%	89%	5%
September	91%	83%	7%
October	90%	81%	3%
November	90%	70%	6%
December	86%	62%	3%
Annual average	88%	77%	5%

1.4 Applicant calculation of access reduction

11. The Applicant has used historical Vantage Personnel On Board (POB) data supplied by Perenco to determine the impact on flights to and from the Waveney platform. This data contains the timings of historic flights to the Waveney NUI in 2020 and 2021 and by matching these flights to the meteorological record it is possible to infer what impact the loss of helicopter access during usable IMC would have had. This analysis is provided in Appendix A of the Helicopter Access Study [APP-205].
12. From this analysis the Applicant sees that 2 out of 72 flights flown in 2020 would have been affected and 1 in 64 helicopter flights flown in 2021 would have been affected. Looking at the specific meteorological conditions surrounding these flights the Applicant believes that there could have been sufficient conditions for helicopter flights to either be brought forward or delayed. Loss of working time would have been 2 hours and 32 minutes across the two years of helicopter flight access.

Table 1.4 Equinor analysis of historical flight data

	2020	2021
Helicopter Flights Impacted	2.77%	1.56%
Hours of access lost (hh:mm)	02:16	00:16

13. If these helicopter flights could not be delayed or brought forward and therefore the corresponding return or outbound flight was also lost due to an insufficient weather window, then the percentages increase to 5.54% and 3.12% which is similar to the 4% loss of daylight access to Waveney NUI that Perenco predicts for wind turbines rotors at a distance >1.26nm.
14. The Applicant has not carried out an analysis of night-time access to an NPI as historical flight data was only available for routine access to the Waveney NUI.

1.5 Summary

15. As reflected at ISH7 the Applicant and Perenco broadly agree on the split of VMC, IMC usable, and IMC no fly.

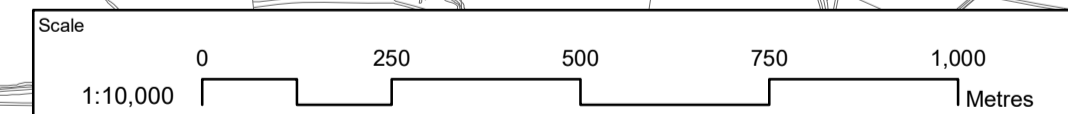
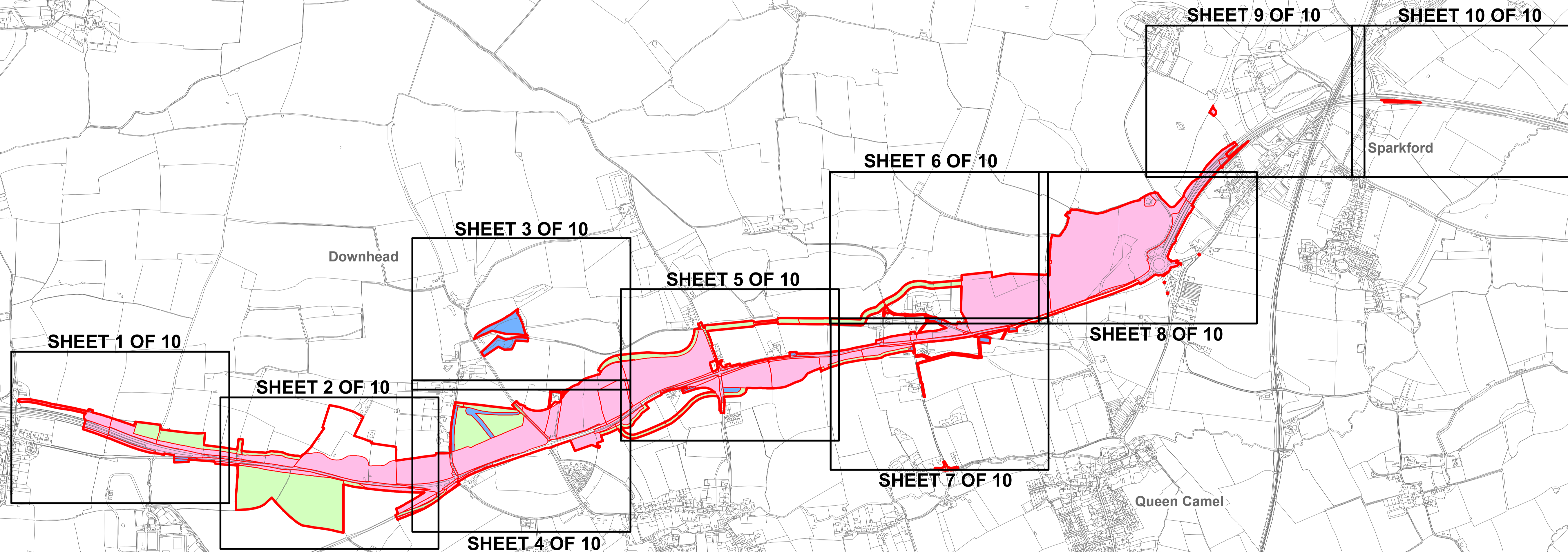
16. For access to the Waveney NUI usable IMC access would be lost with wind turbines closer than 3nm and this accounts for 2 to 4.8% of daylight hours.
17. The Applicant's and Perenco's secondary analysis of how loss of IMC usable flight time effects access to Waveney follows different methodologies and are not directly comparable. Perenco have applied weather windows and return flight criteria whilst the applicant has used historical flight data provided by Perenco.
18. Perenco calculate a loss of access for Waveney NUI as 4% (down to 67%) with wind turbine rotor tips over 1.26nm and 68% (down to 3%) with wind turbine rotor tips closer than 1.01nm.
19. The Applicant's analysis for the Waveney NUI calculates that 2 out of 72 (2.8%) flights would have been impacted in 2020 and 1 out of 64 (1.6%) in 2021 with wind turbine tips 1.01nm from Waveney NUI. The Applicant believes, based on the historic metrological data, that these flights could have been rescheduled. However, assuming a worst case that rescheduling was not possible and therefore the corresponding return or outbound flight was made redundant, the Applicant calculates losses of 5.54% and 3.12% which is similar to the loss of daylight access to Waveney NUI that Perenco predicts for wind turbines rotors at a distance >1.26nm.
20. Perenco calculate a loss of access for a NPI at Waveney as 11% (down to 77%) with wind turbine rotor tips over 1.26nm and 83% (down to 5%) with wind turbine rotor tips closer than 1.01nm.
21. The Applicant has not carried out a historical flight data review for a non-production installation at Waveney as historical flight data for a decommission operation at Waveney does not exist.
22. The key point of difference between the Applicant and Perenco is the distance at which VMC in all wind directions is retained. The Applicant maintains VMC access in any wind condition is possible at 1.01nm based on the current helicopter operators 0.5nm stabilised approach distance. Perenco maintains that 1.26nm is required for VMC access in any wind direction based upon a 0.75nm stabilised approach distance of the future helicopter operator.

1.6 Status of negotiations – Examiners Question Q4.21.1.4

23. The Applicant and Perenco are in active discussions. Progress has been made on the template and wording for protective provisions regarding both the Waveney platform and Waveney – Durango pipeline.
24. Both parties will submit draft Protective Provisions at Deadline 7. The significant difference being the distance which defines the "facilities proximity area" for the existing Waveney platform. Discussions are ongoing to resolve this remaining difference.
25. Commercial discussions are also ongoing.

Appendix A.8

*This appendix has been produced to support the Applicant's response to the Examining Authority's Fourth Written Questions – Q4.8.2.1(d). This document should be read alongside **The Applicant's Responses to the Examining Authority's Fourth Written Questions** [document reference 21.5]*



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KEY

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Project Title
A303 SPARKFORD TO ILCHESTER DUALLING

Drawing Title
**LAND PLANS
REGULATION 5(2)(i)
KEY PLAN**

Drawing Status
PUBLISHED - DEFINITION

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HE PIN | Originator | Volume
- MMSJV - LSI -

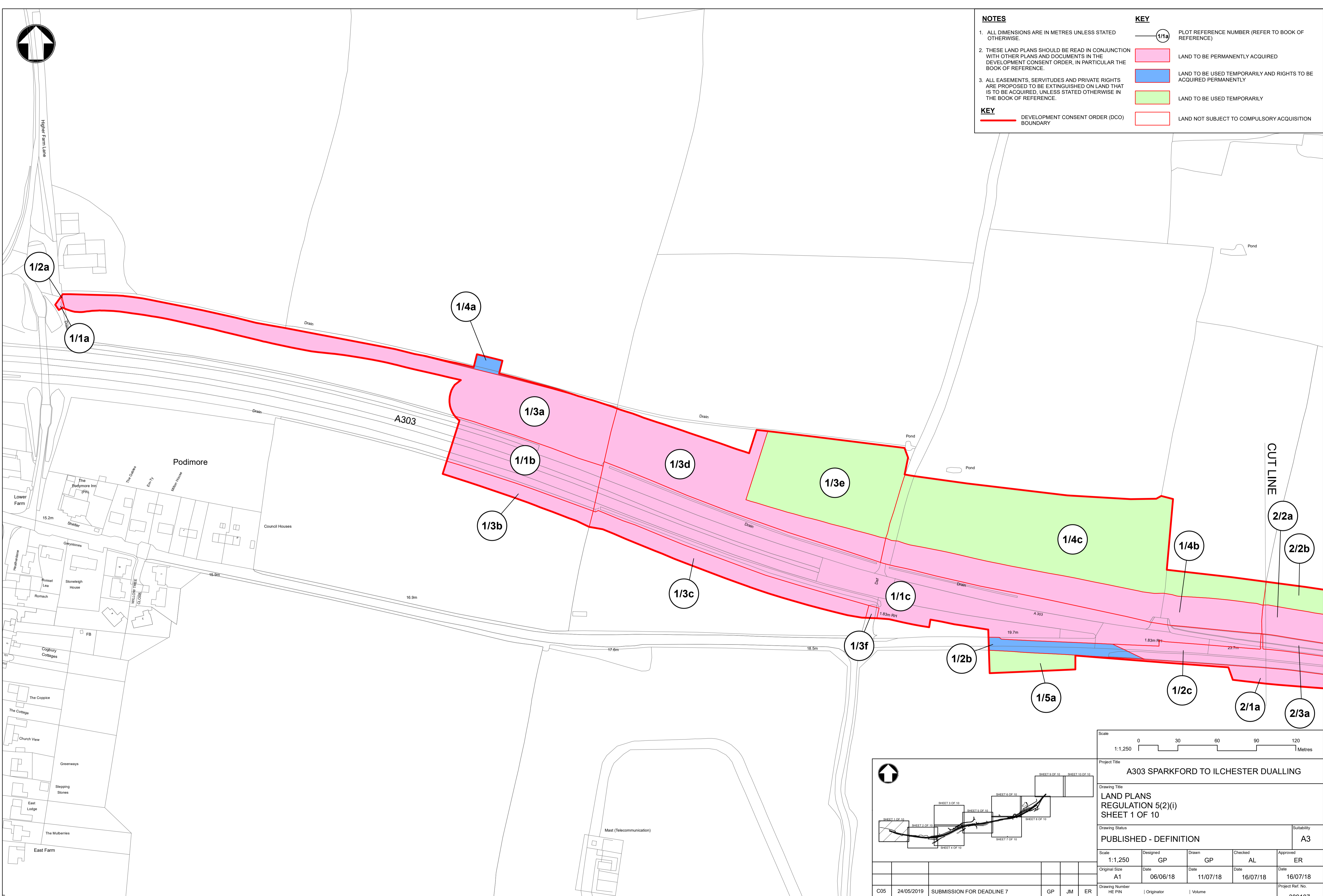
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Revision
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Location
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C01	16/07/2018	DCO SUBMISSION	GP	AL	ER

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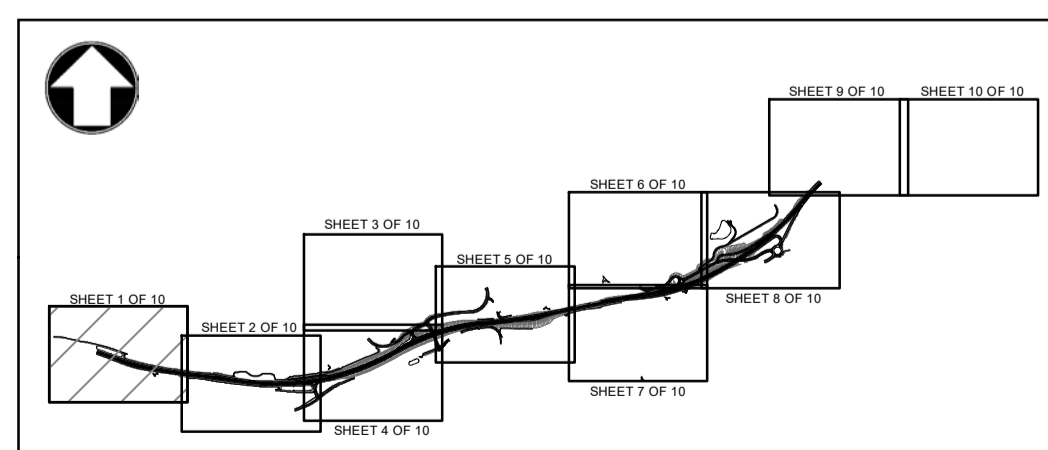
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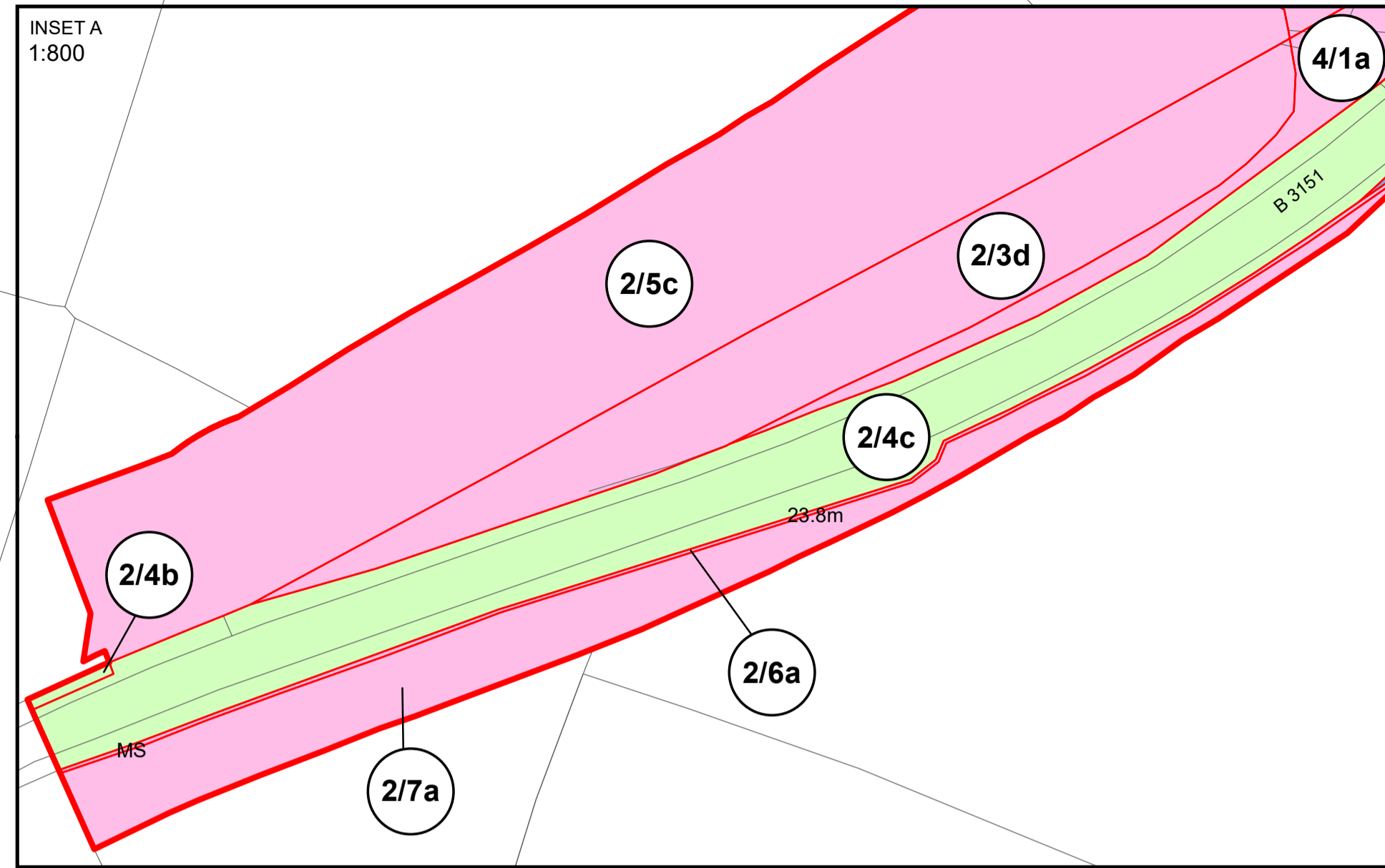
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Location - DR - UU - 2017				Revision C05	

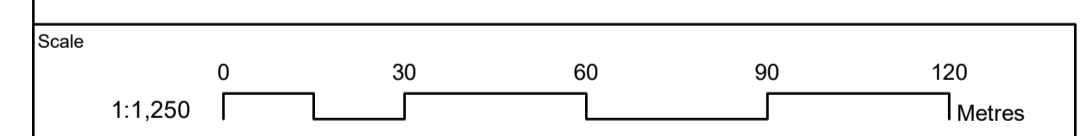
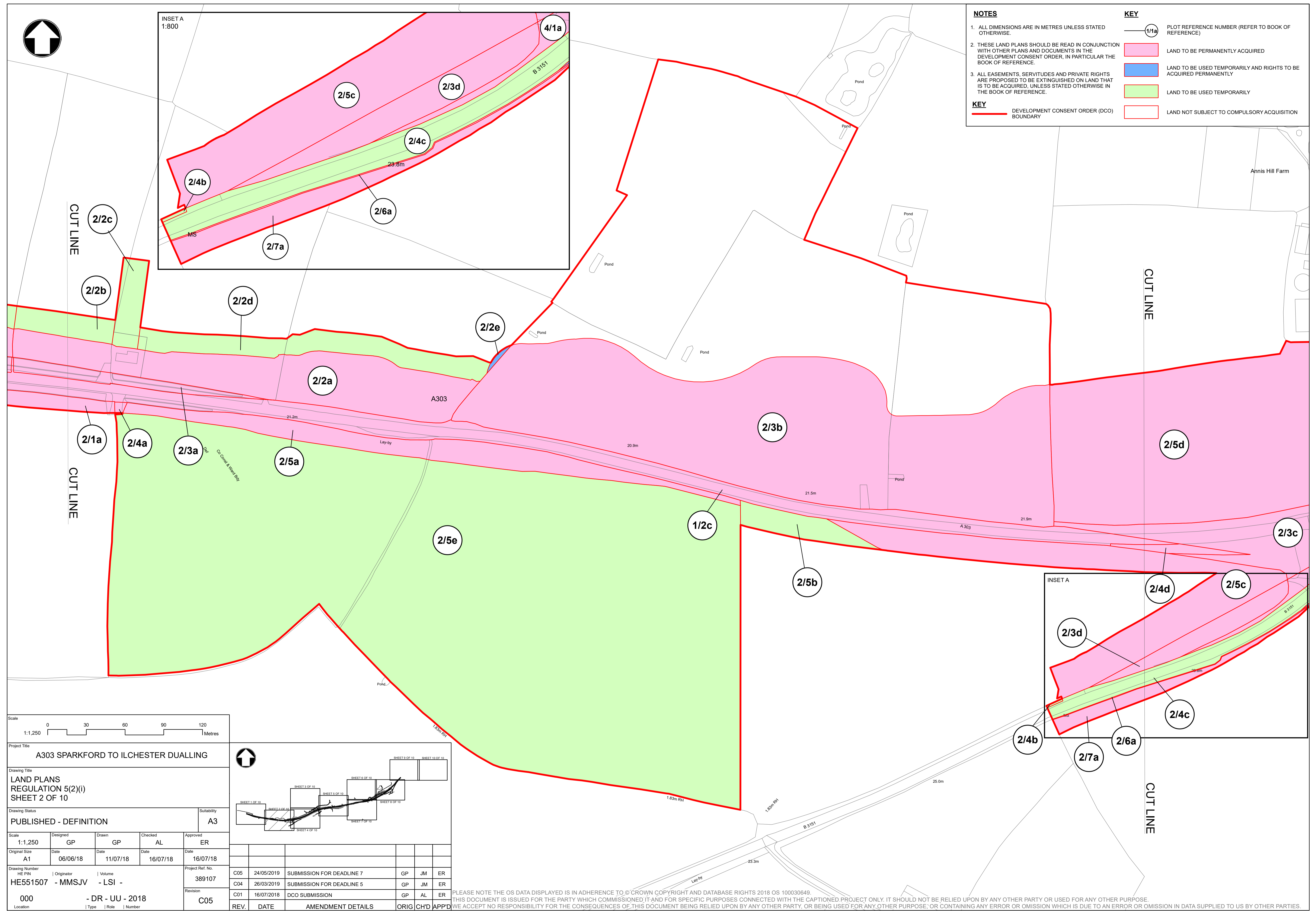


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Project Title
A303 SPARKFORD TO ILCHESTER DUALLING

Drawing Title
**LAND PLANS
REGULATION 5(2)(i)
SHEET 2 OF 10**

Drawing Status
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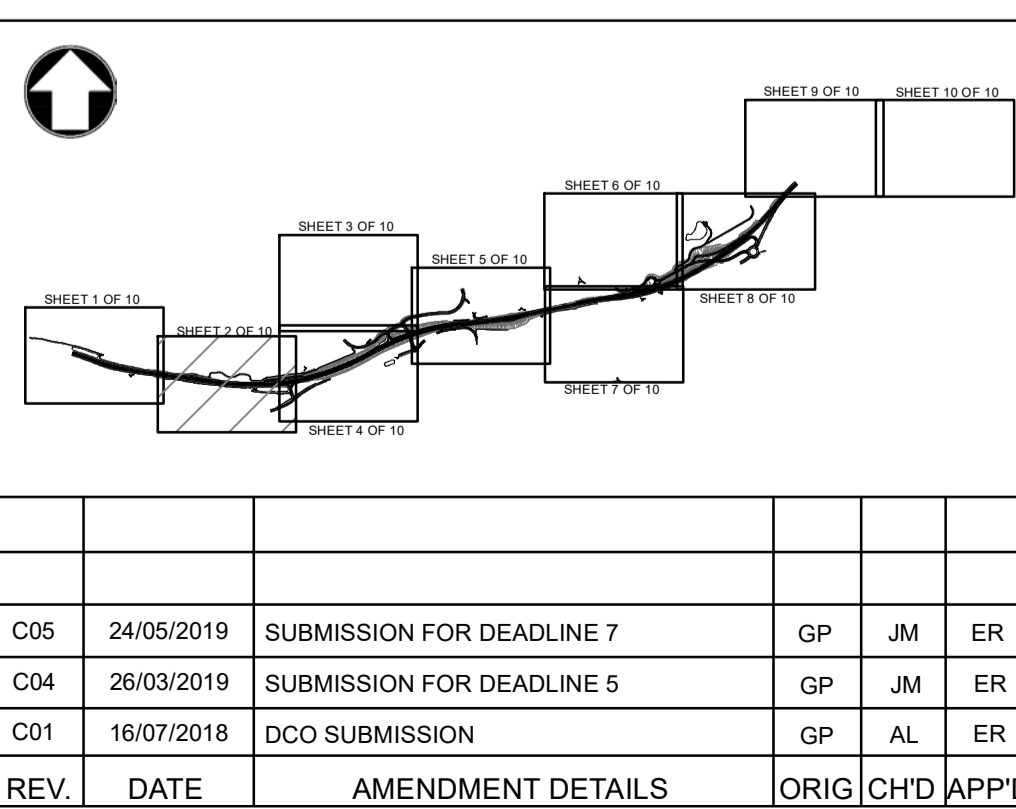
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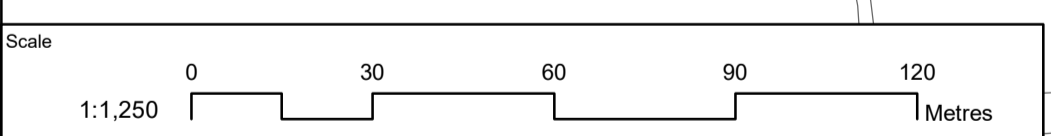
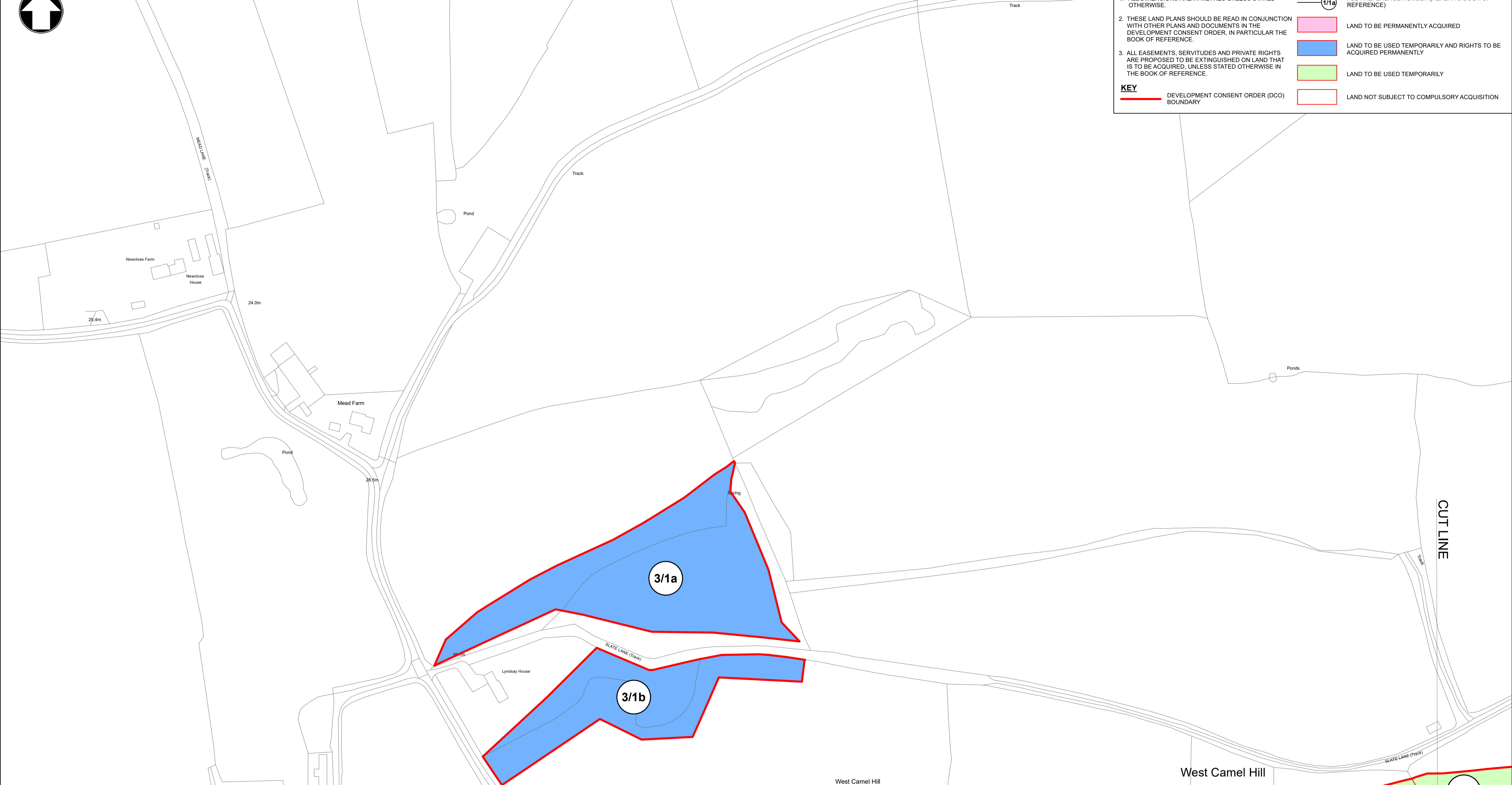


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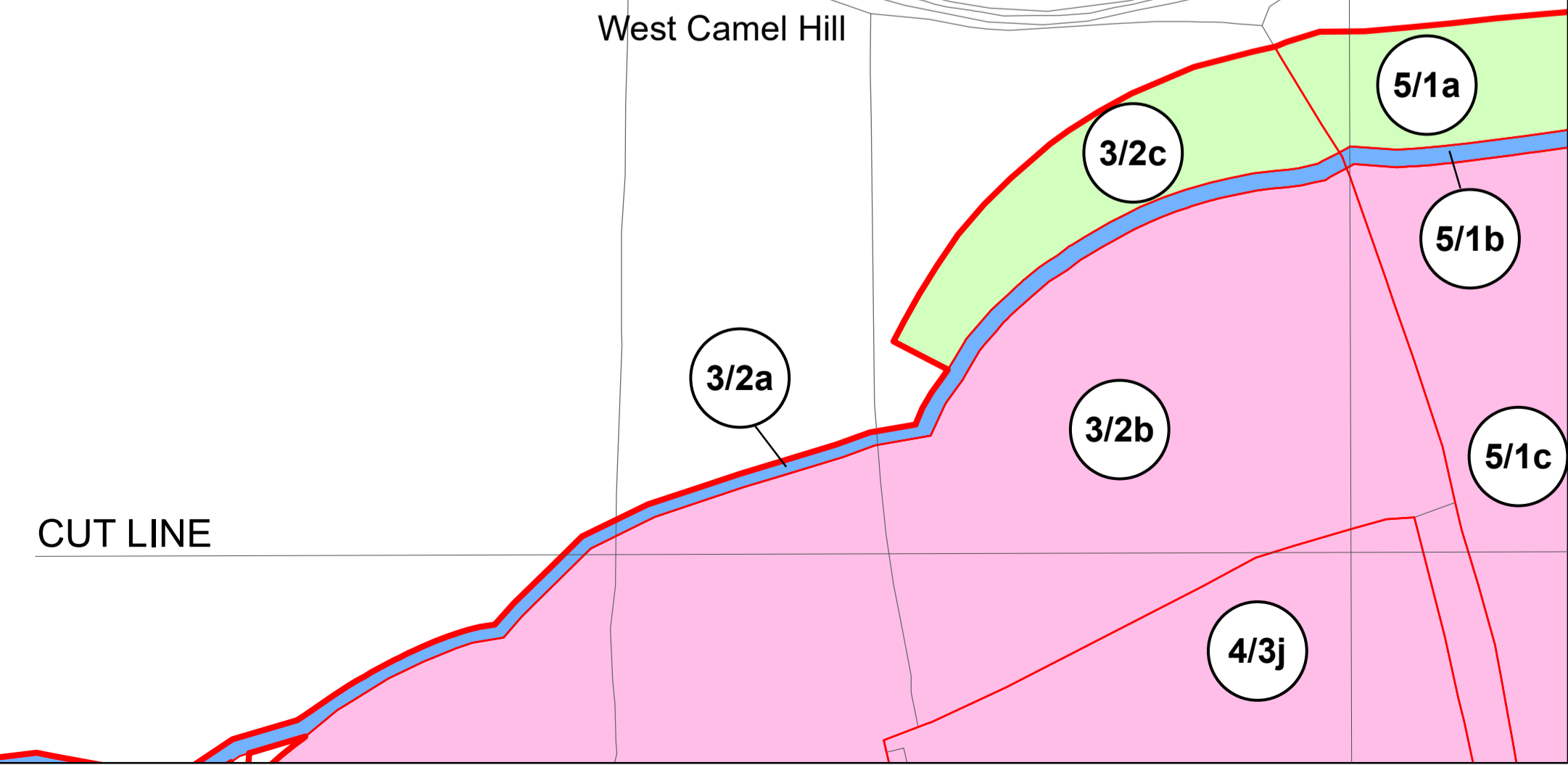
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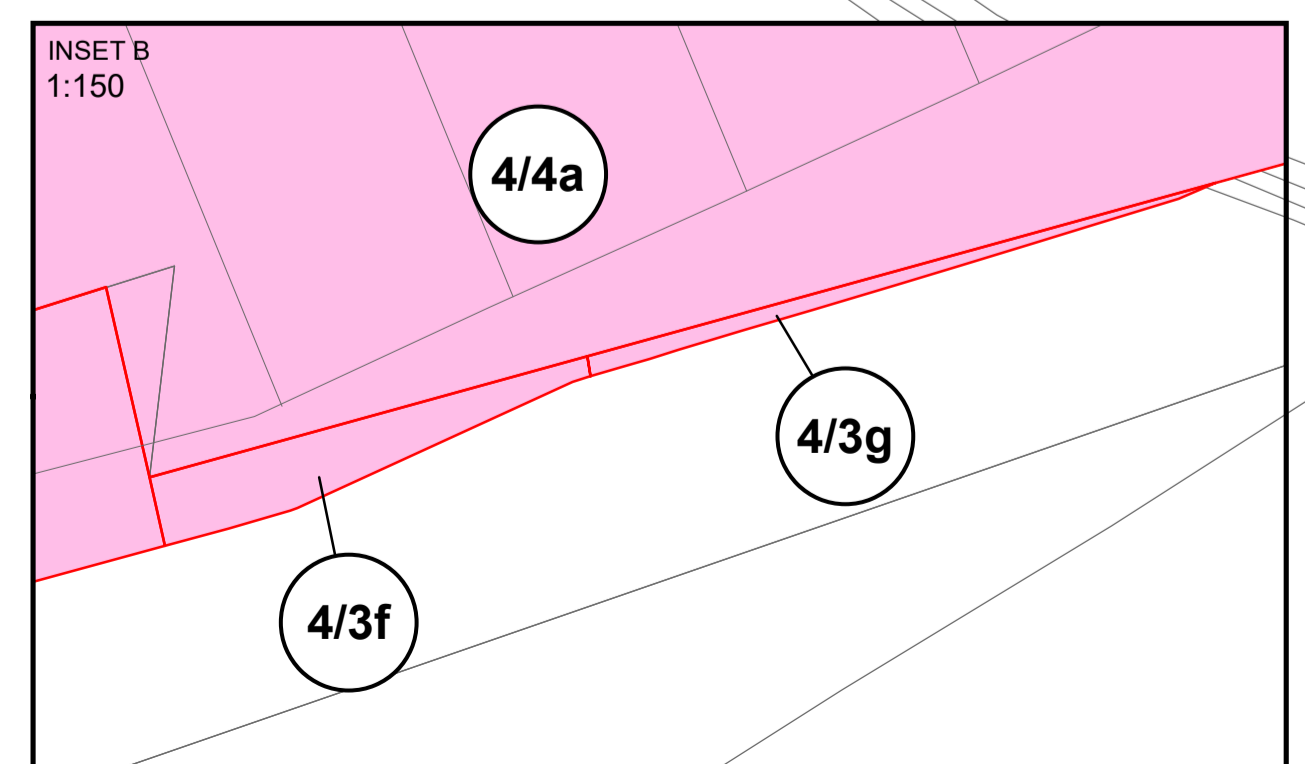
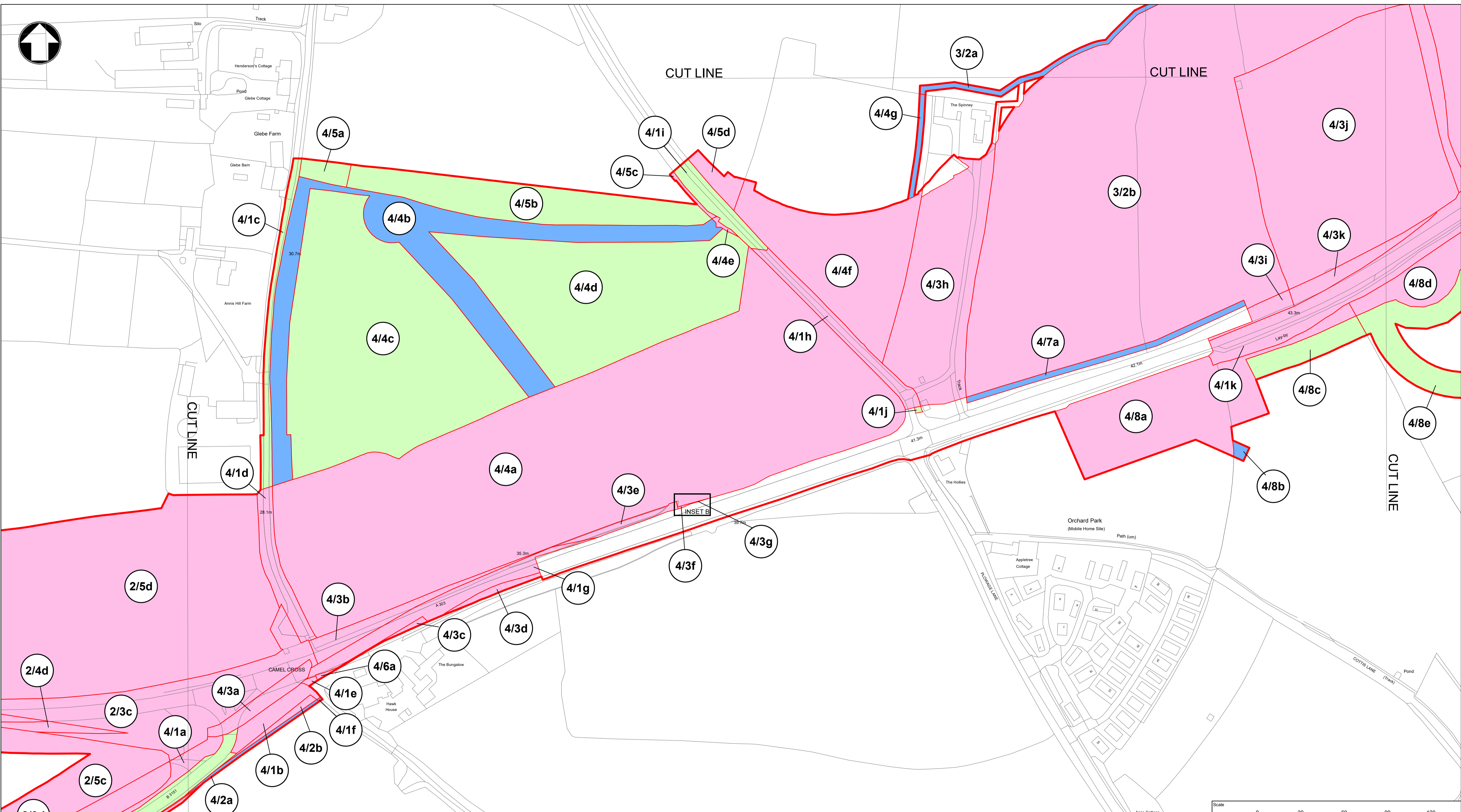
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Sheet layout diagram showing 10 sheets of 10.

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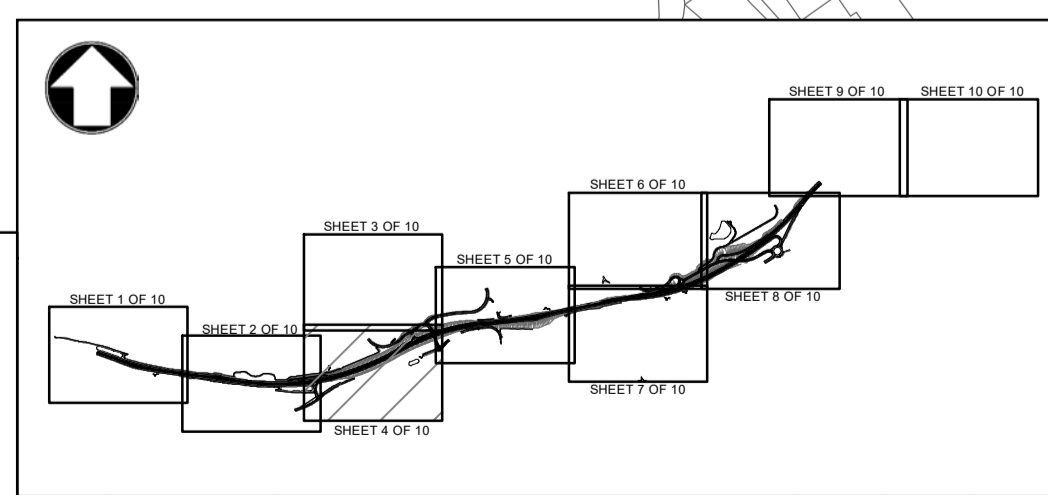


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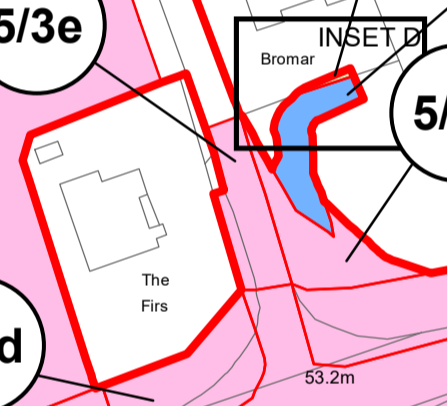
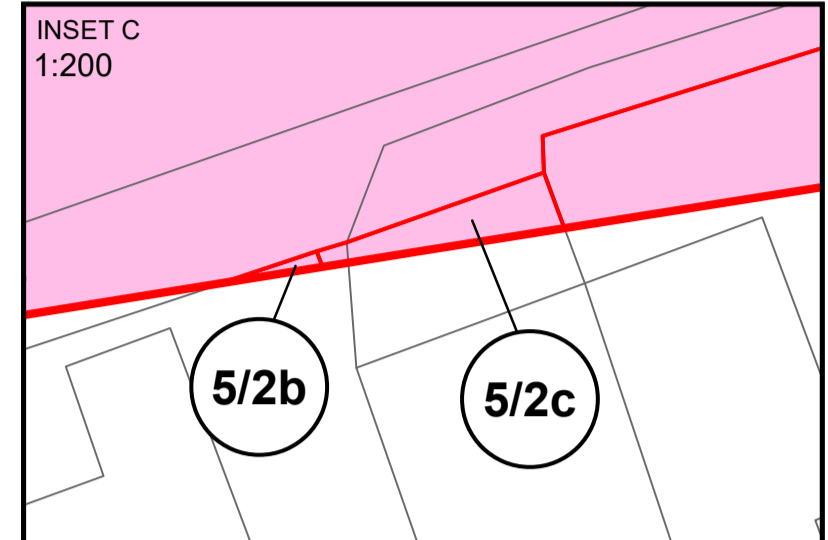
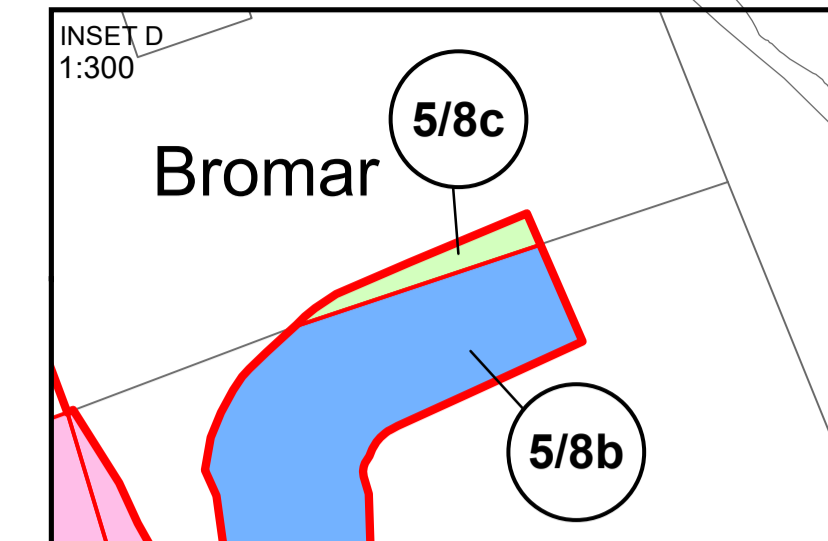
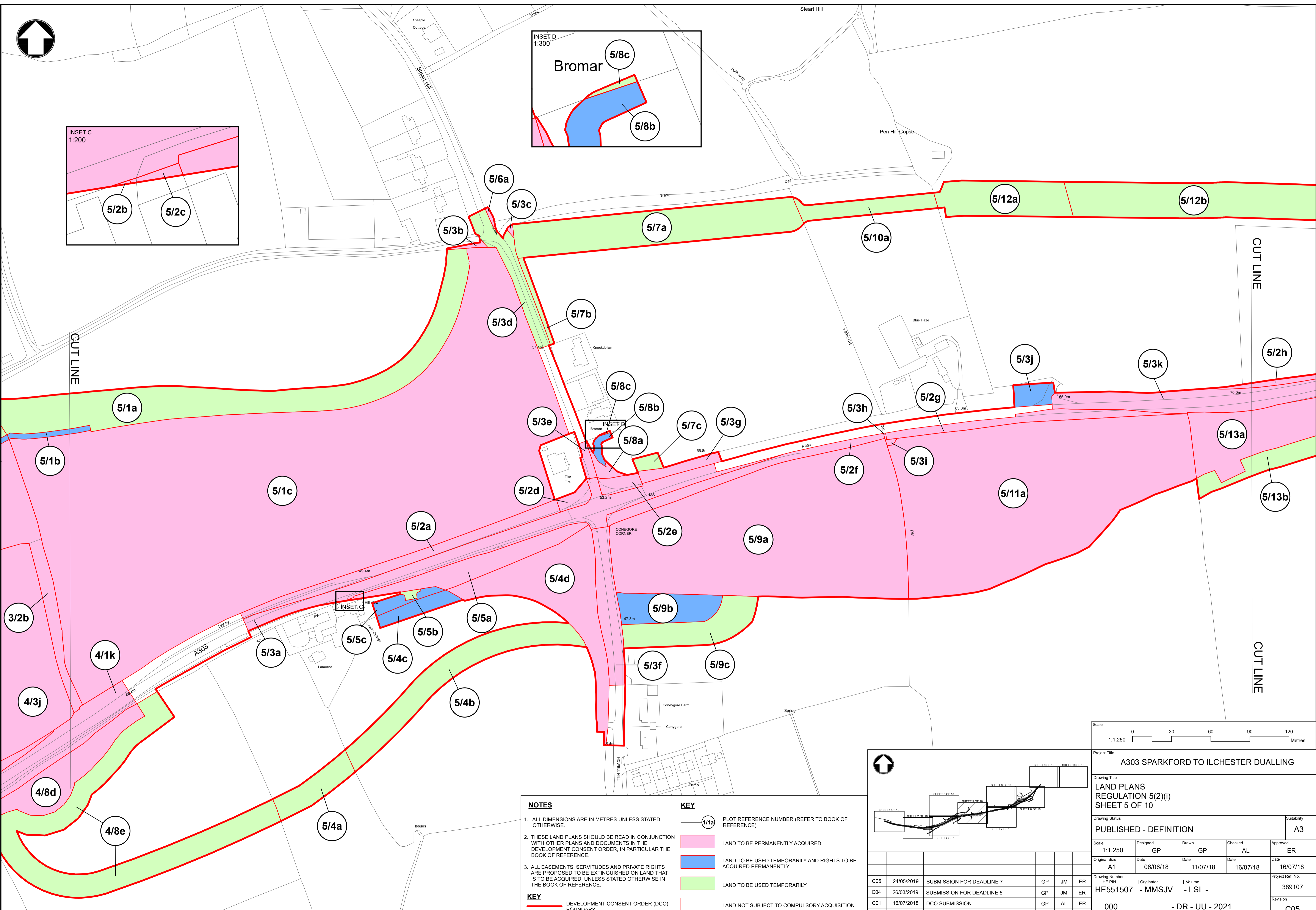
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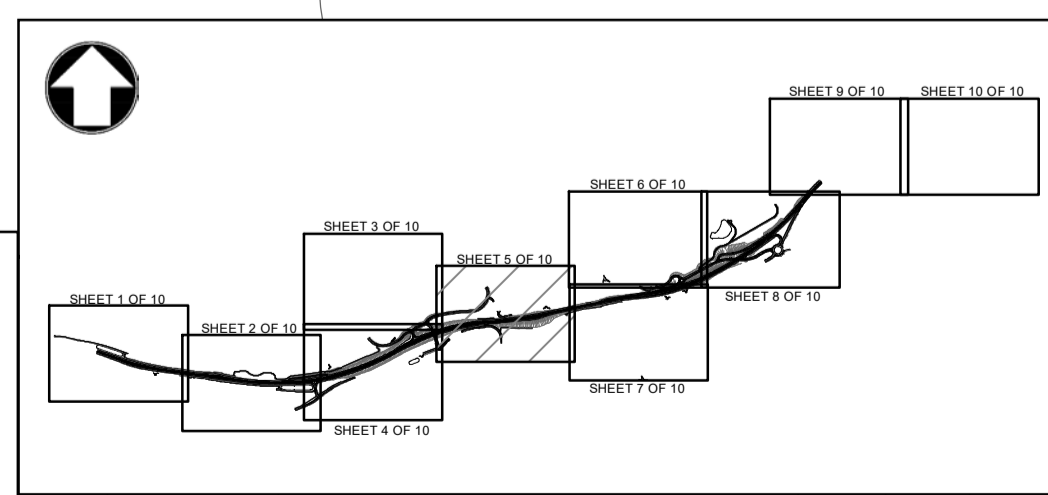


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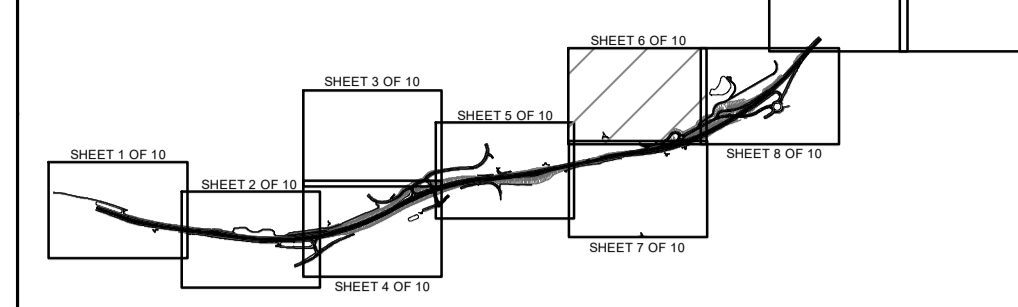
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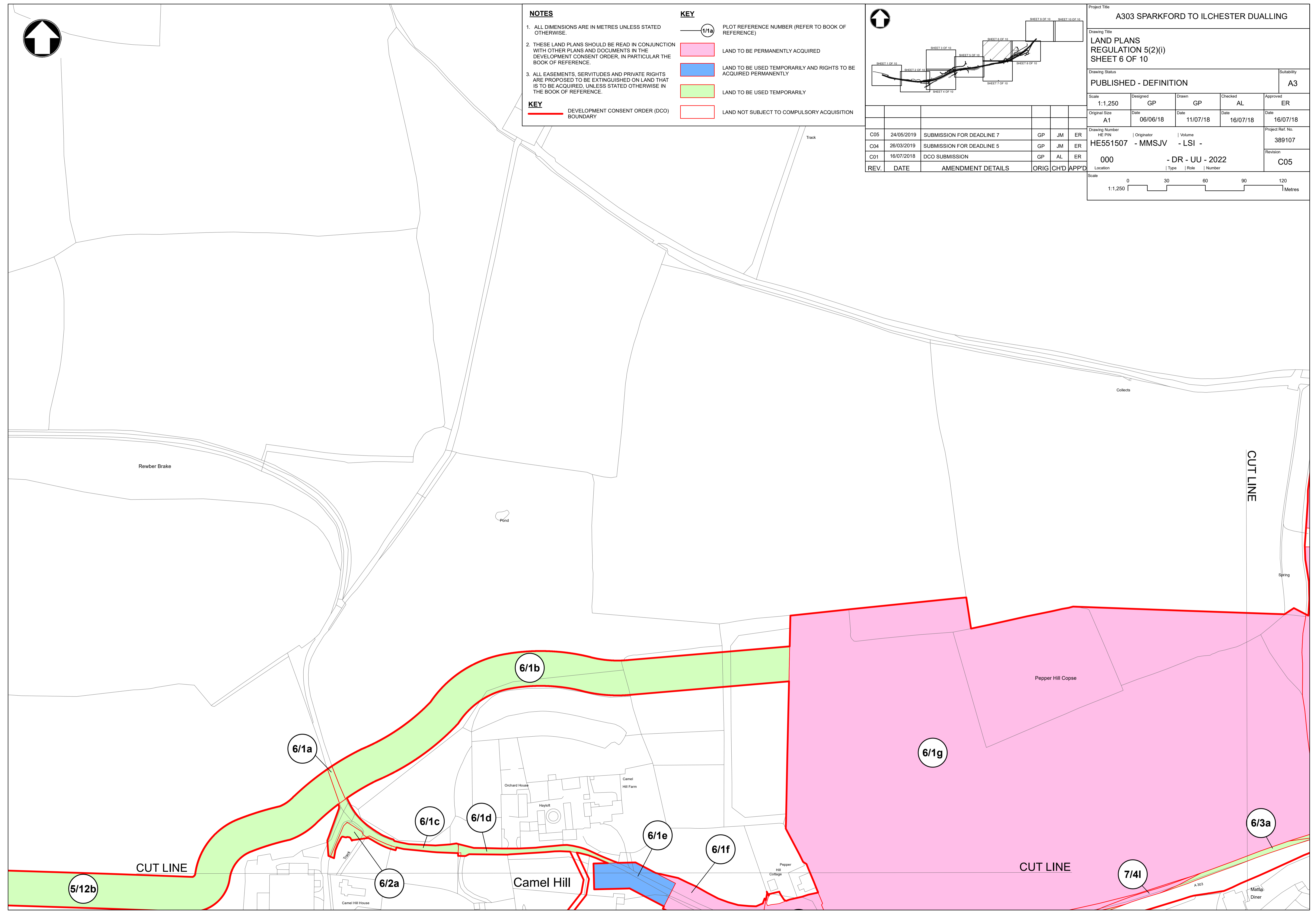
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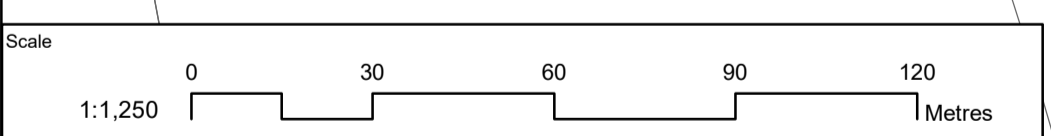
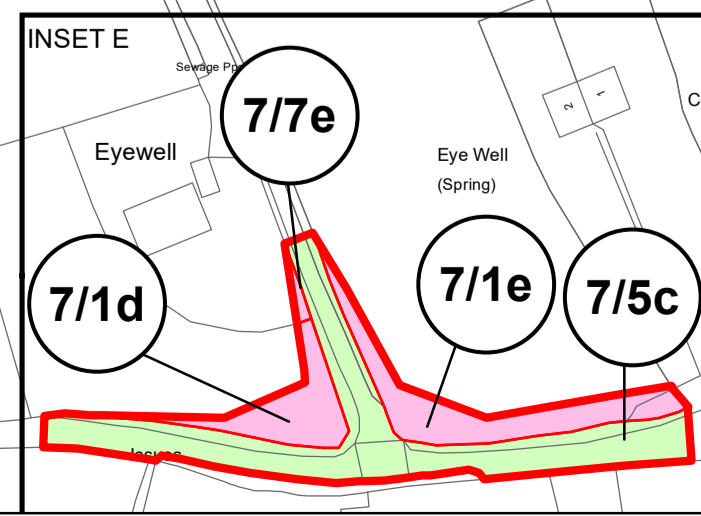
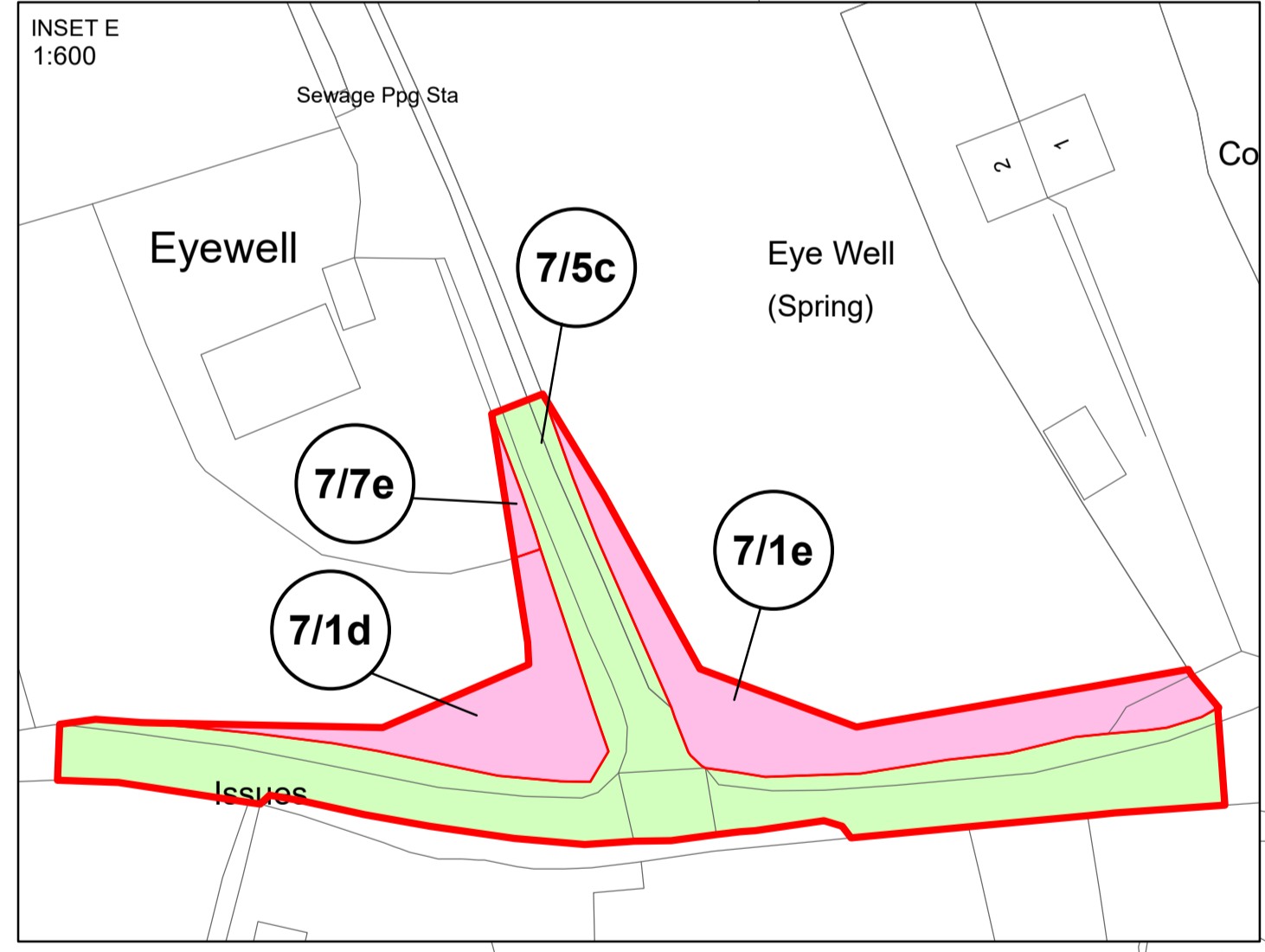
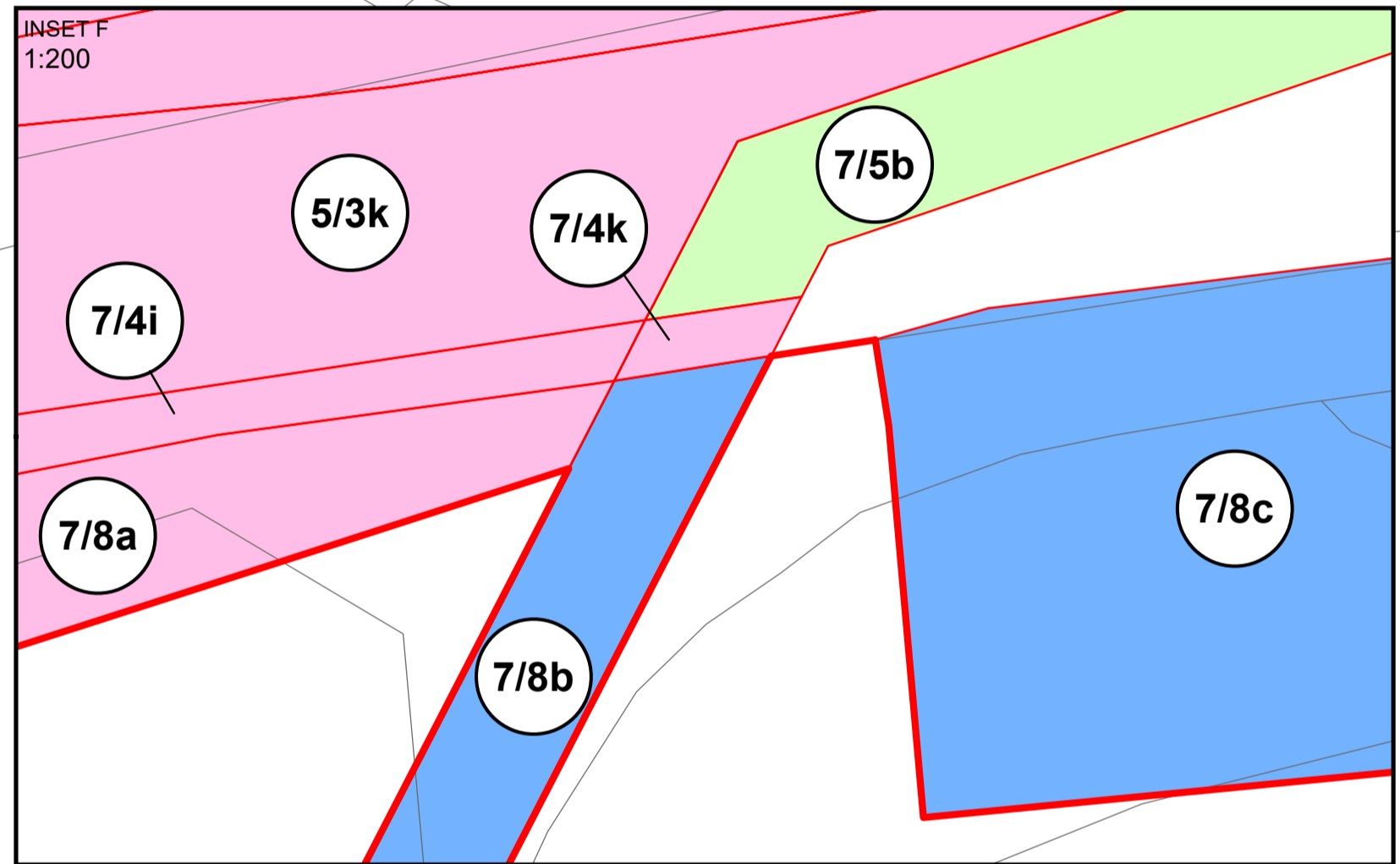
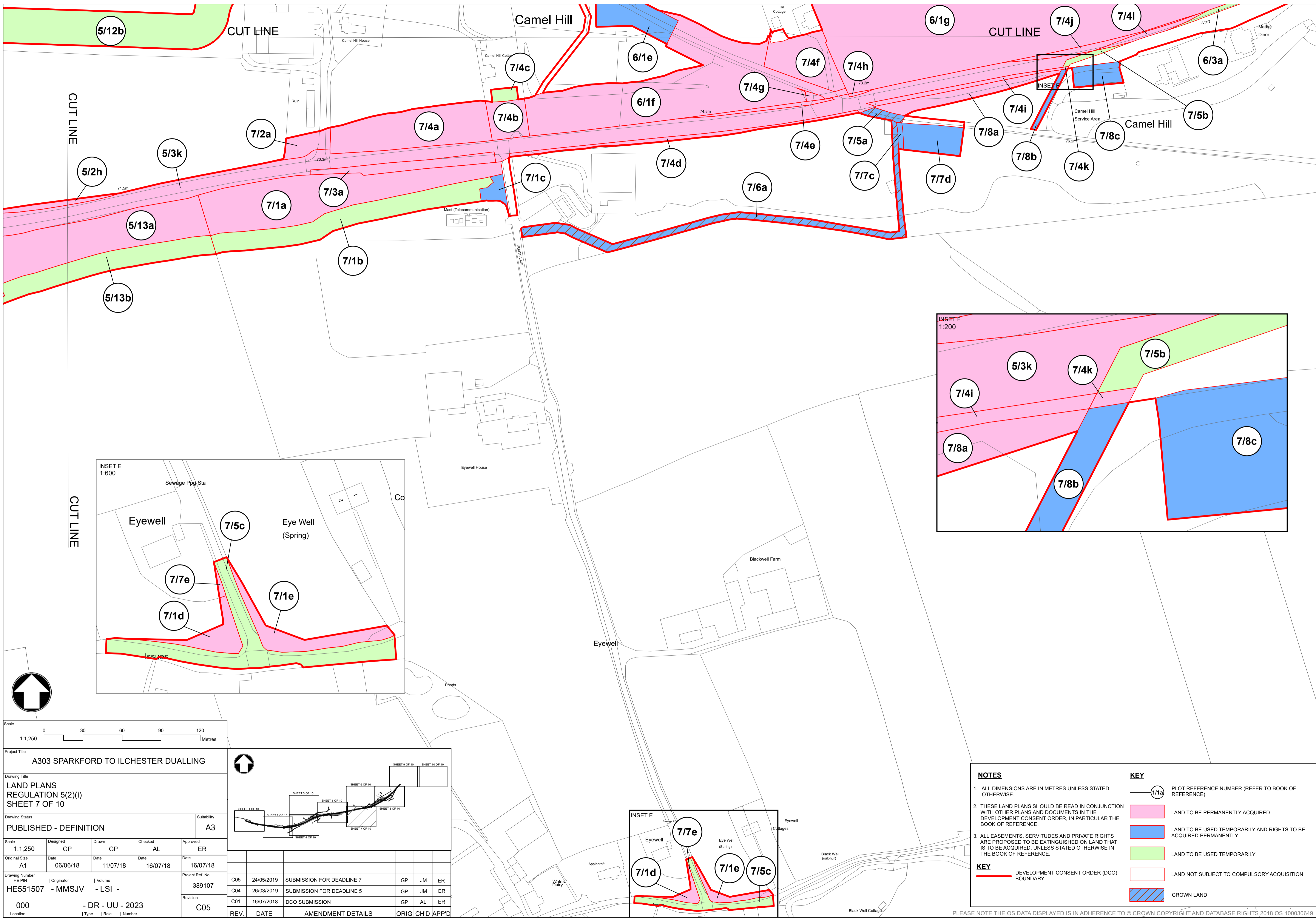
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Revision: **C05**

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Project Title
A303 SPARKFORD TO ILCHESTER DUALLING

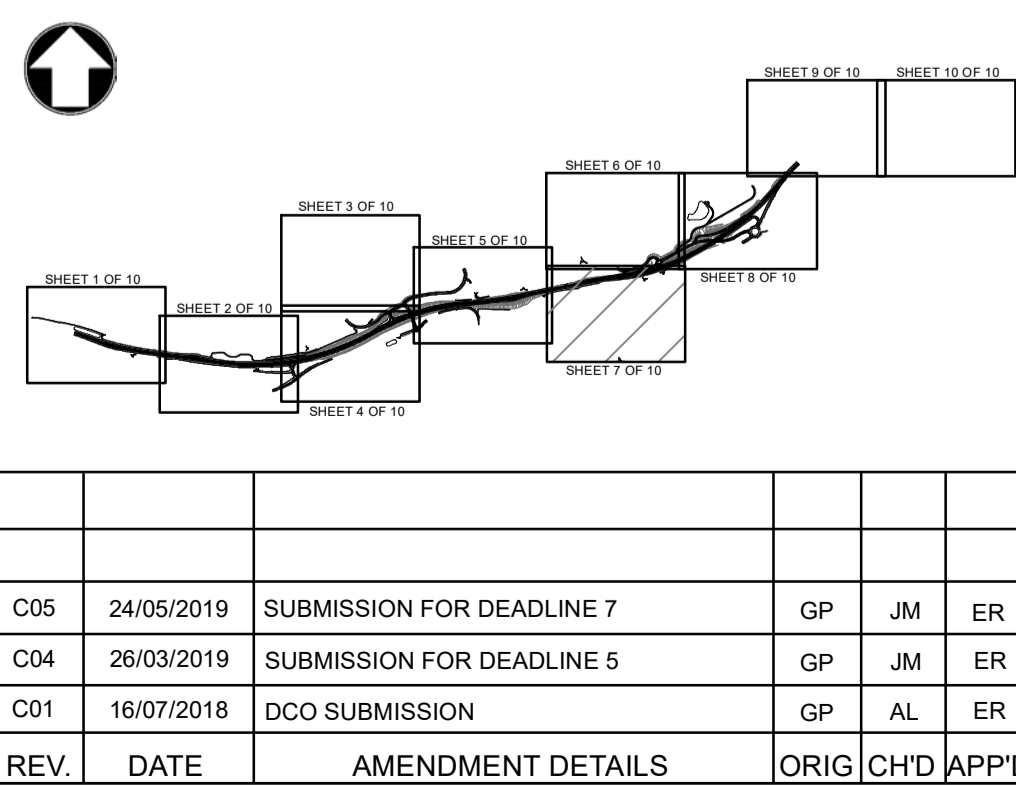
Drawing Title
LAND PLANS
REGULATION 5(2)(i)
SHEET 7 OF 10

Drawing Status
PUBLISHED - DEFINITION

Subsidiary
A3

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Drawing Number	Originator	Volume	Project Ref. No.	
HE PIN	- MMSJV	- LSI -	389107	
000	- DR - UU - 2023		Revision	
Location	Type	Role	Number	
			C05	

REV.	DATE	AMENDMENT DETAILS	ORIG	CHD	APP'D
C05	24/05/2019	SUBMISSION FOR DEADLINE 7	GP	JM	ER
C04	28/03/2019	SUBMISSION FOR DEADLINE 5	GP	JM	ER
C01	16/07/2018	DCO SUBMISSION	GP	AL	ER



NOTES

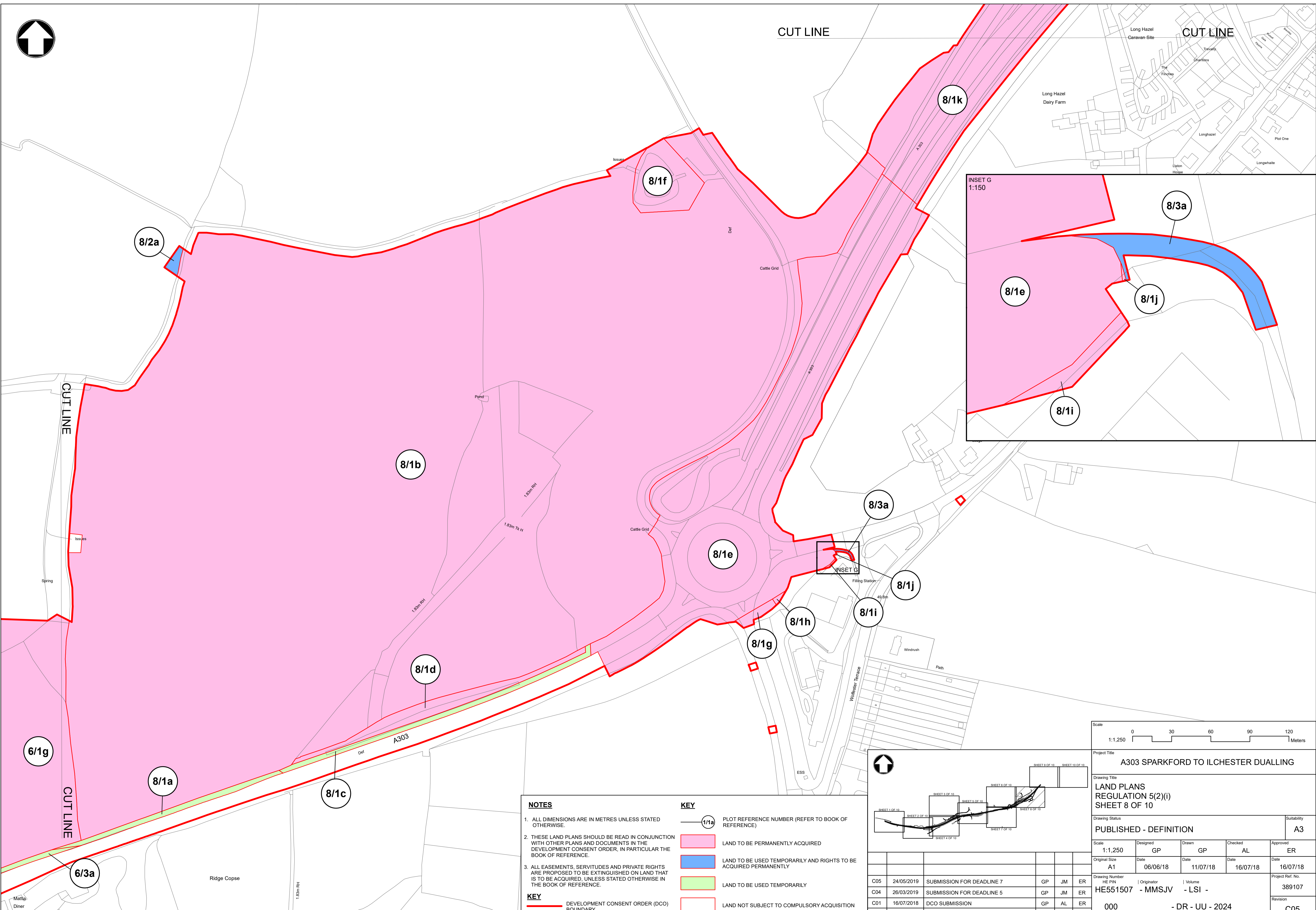
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KEY

	LAND TO BE PERMANENTLY ACQUIRED
	LAND TO BE USED TEMPORARILY AND RIGHTS TO BE ACQUIRED PERMANENTLY
	LAND TO BE USED TEMPORARILY
	DEVELOPMENT CONSENT ORDER (DCO) BOUNDARY
	CROWN LAND

KEY

	PLOT REFERENCE NUMBER (REFER TO BOOK OF REFERENCE)
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CUT LINE

CUT LINE

CUT LINE

CUT LINE

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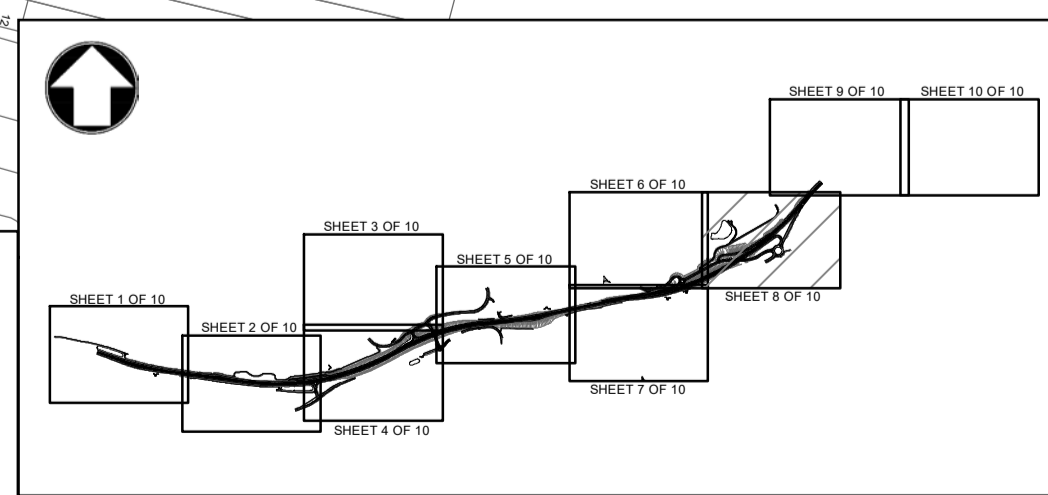
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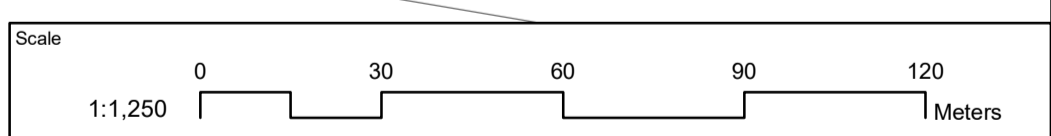
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REV.	DATE	AMENDMENT DETAILS	ORIG	CHD	APPD
C05	24/05/2019	SUBMISSION FOR DEADLINE 7	GP	JM	ER
C04	26/03/2019	SUBMISSION FOR DEADLINE 5	GP	JM	ER
C01	16/07/2018	DCO SUBMISSION	GP	AL	ER



Project Title
A303 SPARKFORD TO ILCHESTER DUALLING

Drawing Title
**LAND PLANS
REGULATION 5(2)(i)
SHEET 8 OF 10**

Drawing Status
PUBLISHED - DEFINITION

Scale	Designed	Drawn	Checked	Approved	Suitability
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Original Size	Date	Date	Date	Date	Project Ref. No.
A1	06/06/18	11/07/18	16/07/18	16/07/18	HE551507 - MMSJV - LSI -

Drawing Number	Originator	Volume	Project Ref. No.
000	- DR - UU - 2024	- LSI -	389107

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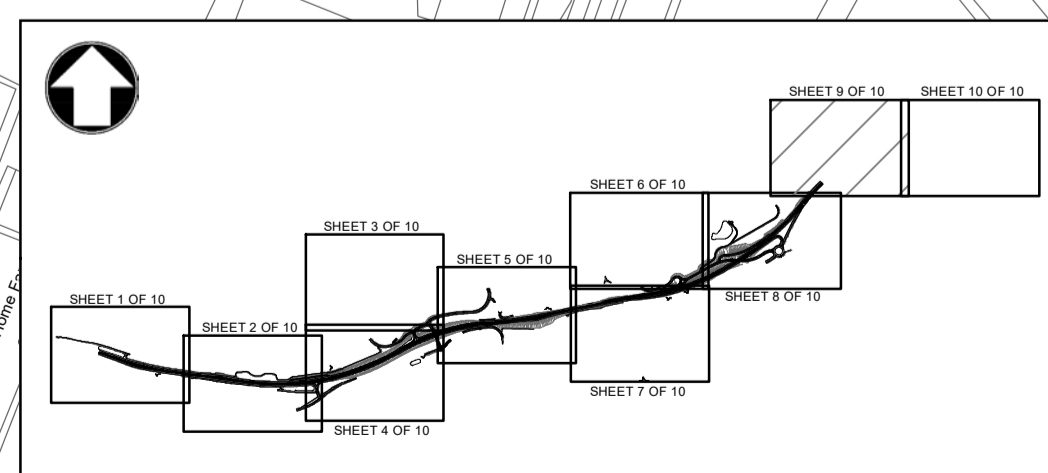
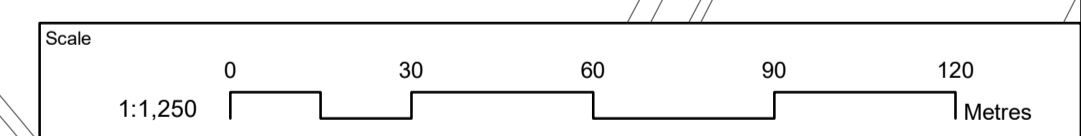
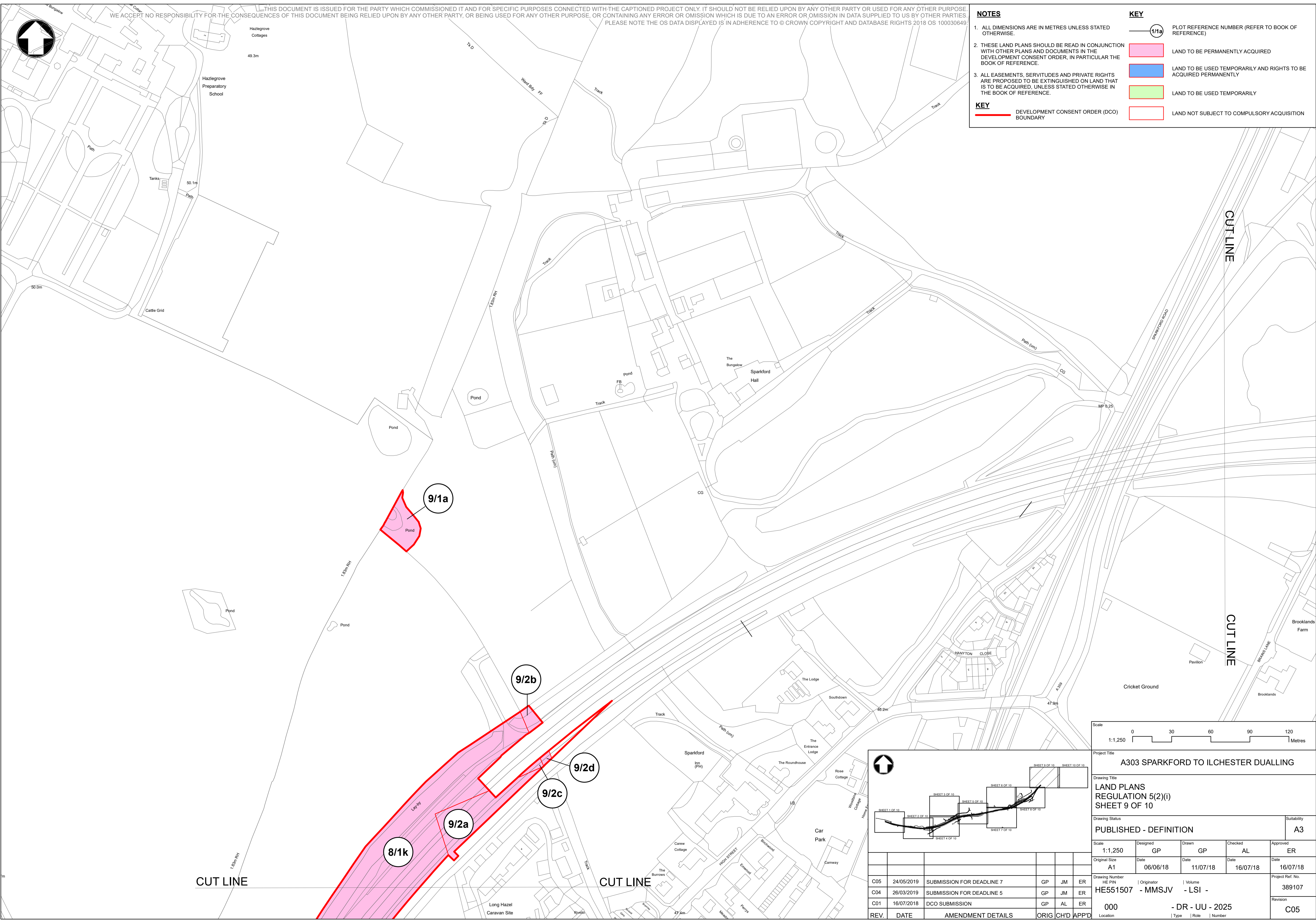
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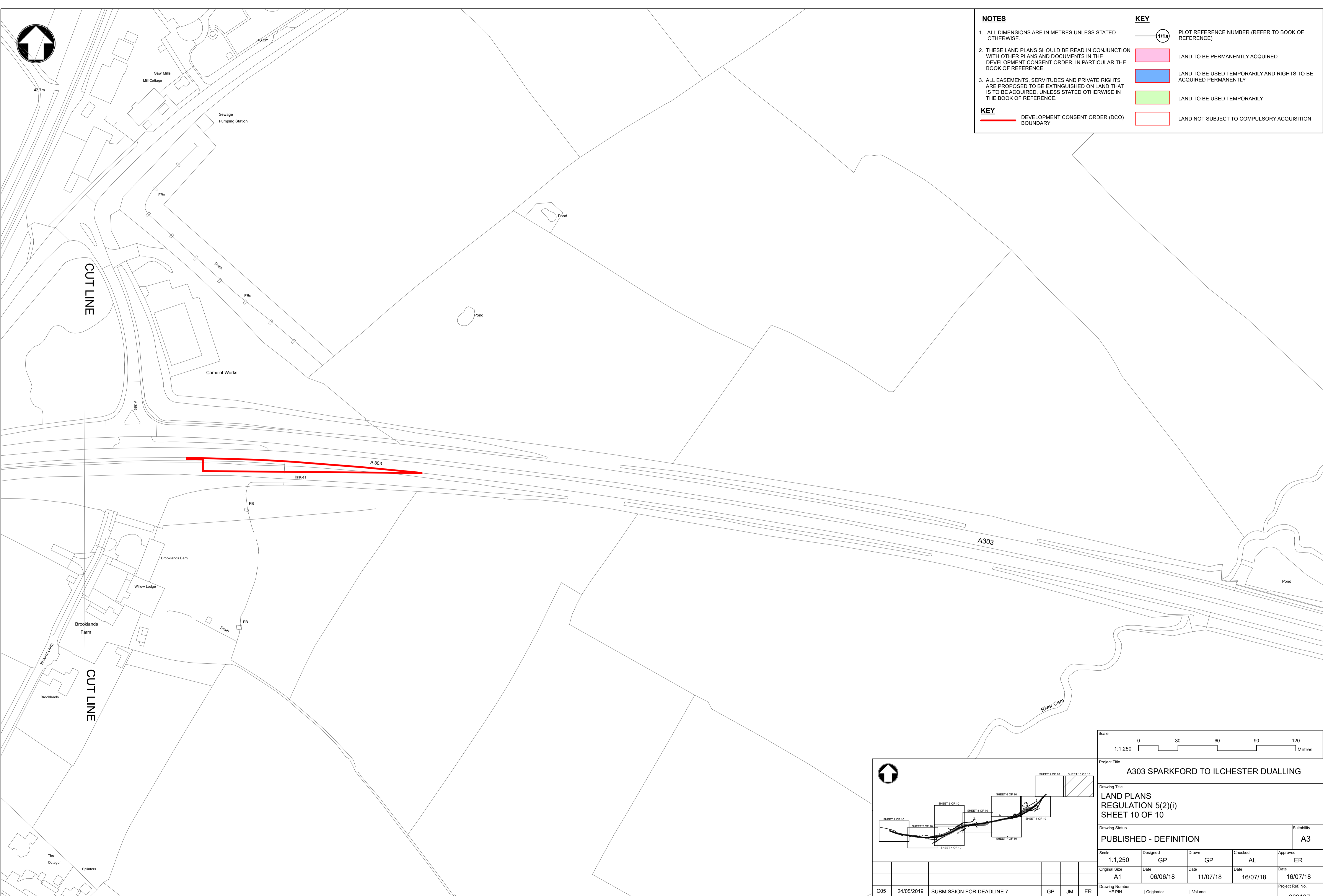
KEY

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Metres					
Project Title					
A303 SPARKFORD TO ILCHESTER DUALLING					
Drawing Title					
LAND PLANS REGULATION 5(2)(i) SHEET 9 OF 10					
Drawing Status					Suitability
PUBLISHED - DEFINITION					A3
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HE PIN	MMSJV	LSI	389107		
000	- DR - UU - 2025		Revision		
Location	Type	Role	Number		
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REV.	DATE	AMENDMENT DETAILS	ORIG	CHD	APPD
C05	24/05/2019	SUBMISSION FOR DEADLINE 7	GP	JM	ER
C04	26/03/2019	SUBMISSION FOR DEADLINE 5	GP	JM	ER
C01	16/07/2018	DCO SUBMISSION	GP	AL	ER



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Project Title: **A303 SPARKFORD TO ILCHESTER DUALLING**

Drawing Title: **LAND PLANS REGULATION 5(2)(i) SHEET 10 OF 10**

Drawing Status: **PUBLISHED - DEFINITION** Suitability: **A3**

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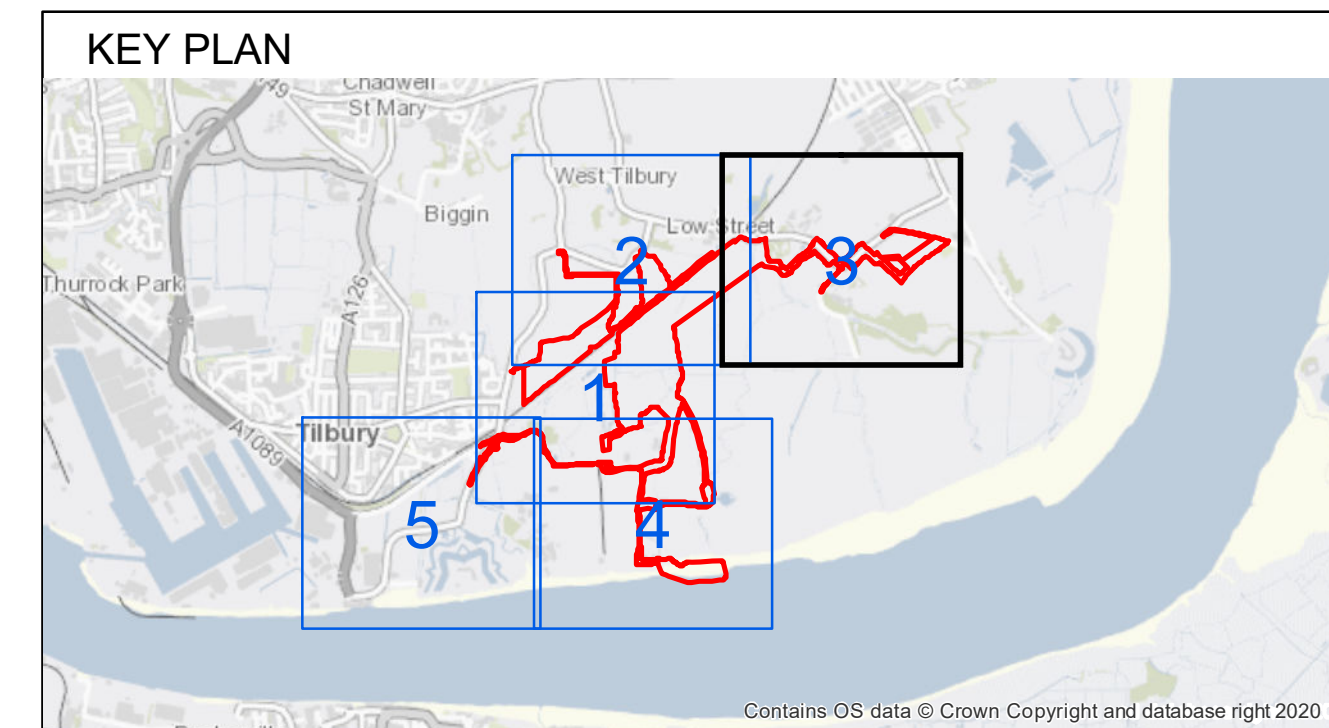
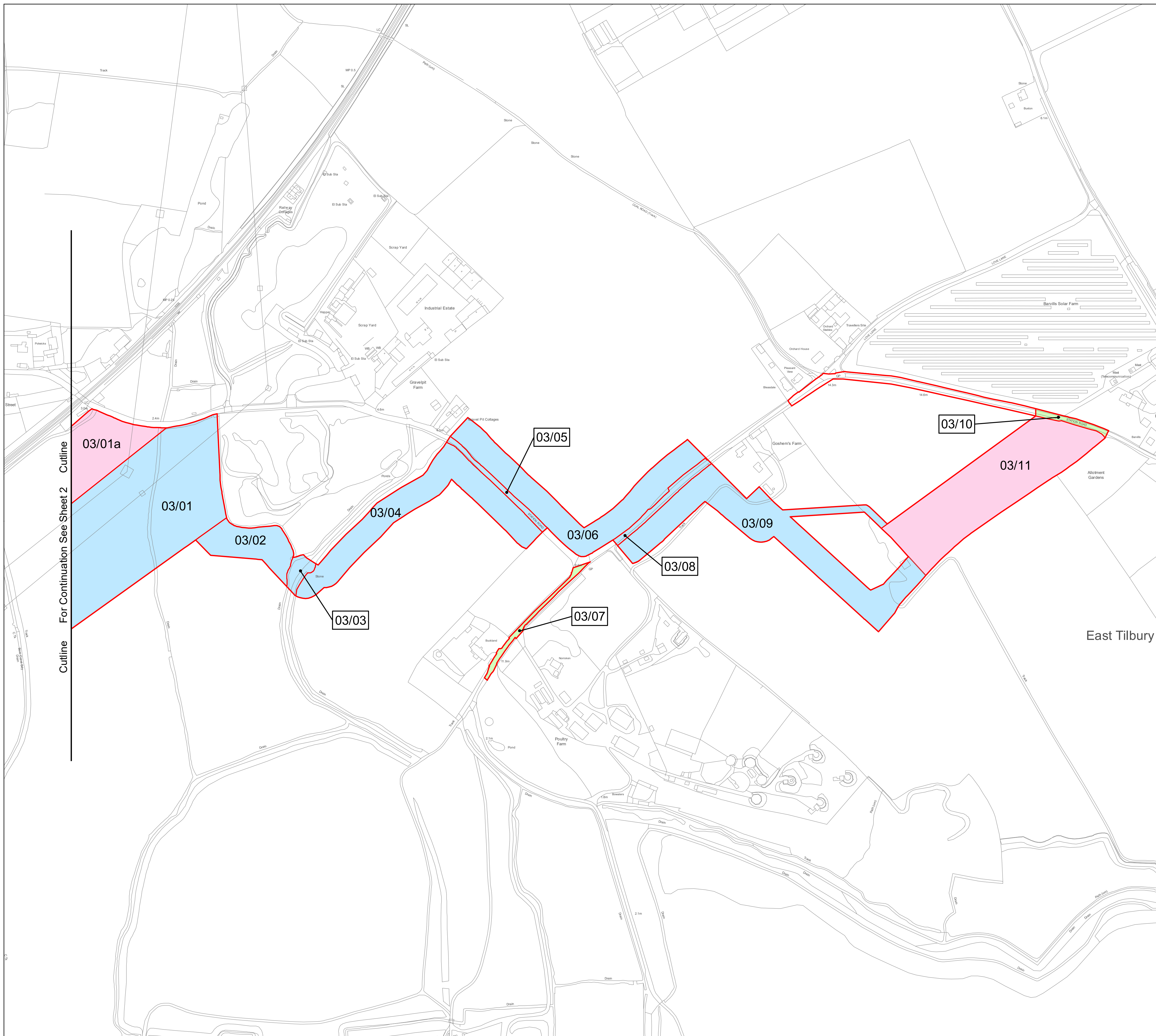
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Location: **000 - DR - UU - 2026** Revision: **C05**

REV.	DATE	AMENDMENT DETAILS	ORIG	CHD	APPD
C05	24/05/2019	SUBMISSION FOR DEADLINE 7	GP	JM	ER
C04	26/03/2019	SUBMISSION FOR DEADLINE 5	GP	JM	ER
C01	16/07/2018	DCO SUBMISSION	GP	AL	ER

Appendix A.9

*This appendix has been produced to support the Applicant's response to the Examining Authority's Fourth Written Questions – Q4.8.2.1(d). This document should be read alongside **The Applicant's Responses to the Examining Authority's Fourth Written Questions** [document reference 21.5]*



- Key**
- Plot Boundary
 - Permanent Freehold Acquisition
 - Acquisition of Permanent New Rights
 - Temporary Possession

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Client **THURROCK POWER**
A Statera Energy company

Designer **ardent**
infrastructure and regeneration

Project **Thurrock Flexible Generation Plant**

Drawing Title **Land Plans Sheet 3 of 5**

Doc. Ref. 2.2	APFP Ref. 5(2)(i)	Revision 006
Scale 1:2,500 @ A1	Spatial Reference System	Date 29/07/2021
British National Grid		

Drawn By I.Maxim	Checked By A.Pagonis	Approved By P.Gibbard
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Drawing reference **007_ARDG_STATERA_THRCK_DCO_Land_Plans**

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Appendix A.10

*This appendix has been produced to support the Applicant's response to the Examining Authority's Fourth Written Questions – Q4.19.1.7. This document should be read alongside **The Applicant's Responses to the Examining Authority's Fourth Written Questions** [document reference 21.5]*



Sheringham Shoal and Dudgeon Extension Projects

Shipping & Navigation Hazard Workshop

10th August 2021

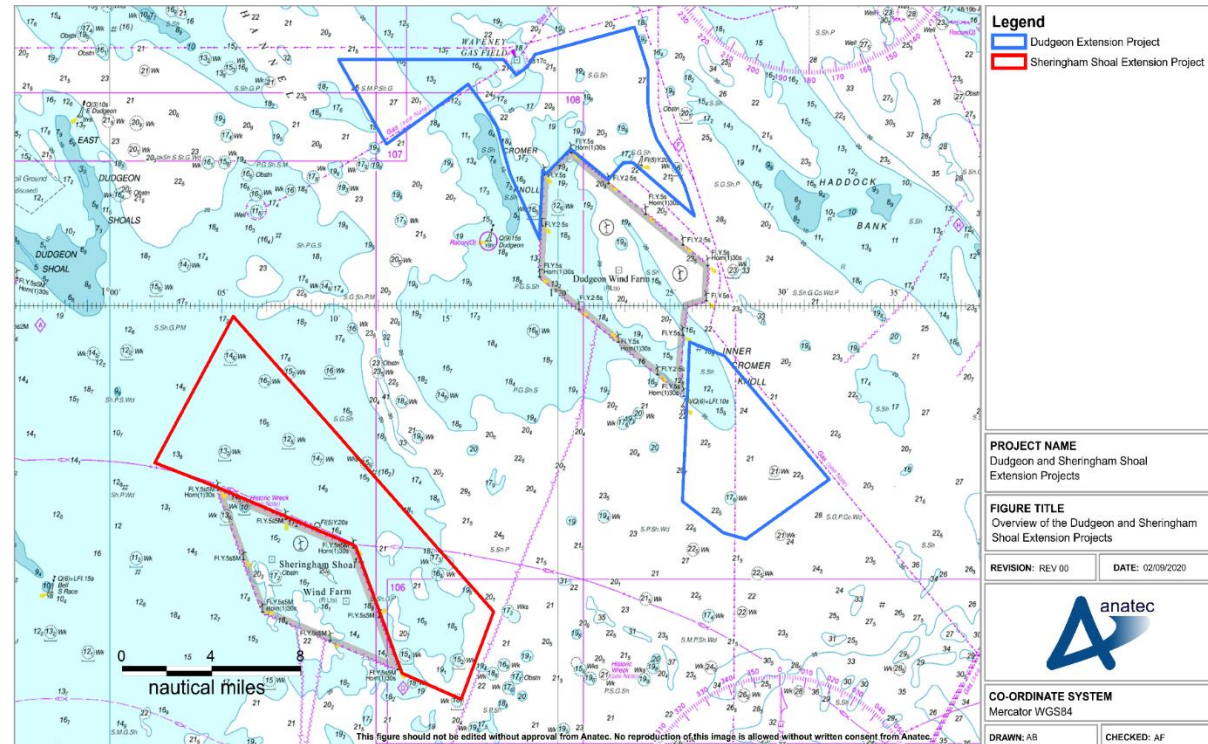
Agenda

1000-1010	Welcome and Introductions
1010-1020	Overview of DEP and SEP / Hazard Workshop Methodology
1020-1030	Navigational Features
1030-1055	Marine Traffic Data
1055-1155	Hazard Discussions
1155-1200	Close Out / Next Steps

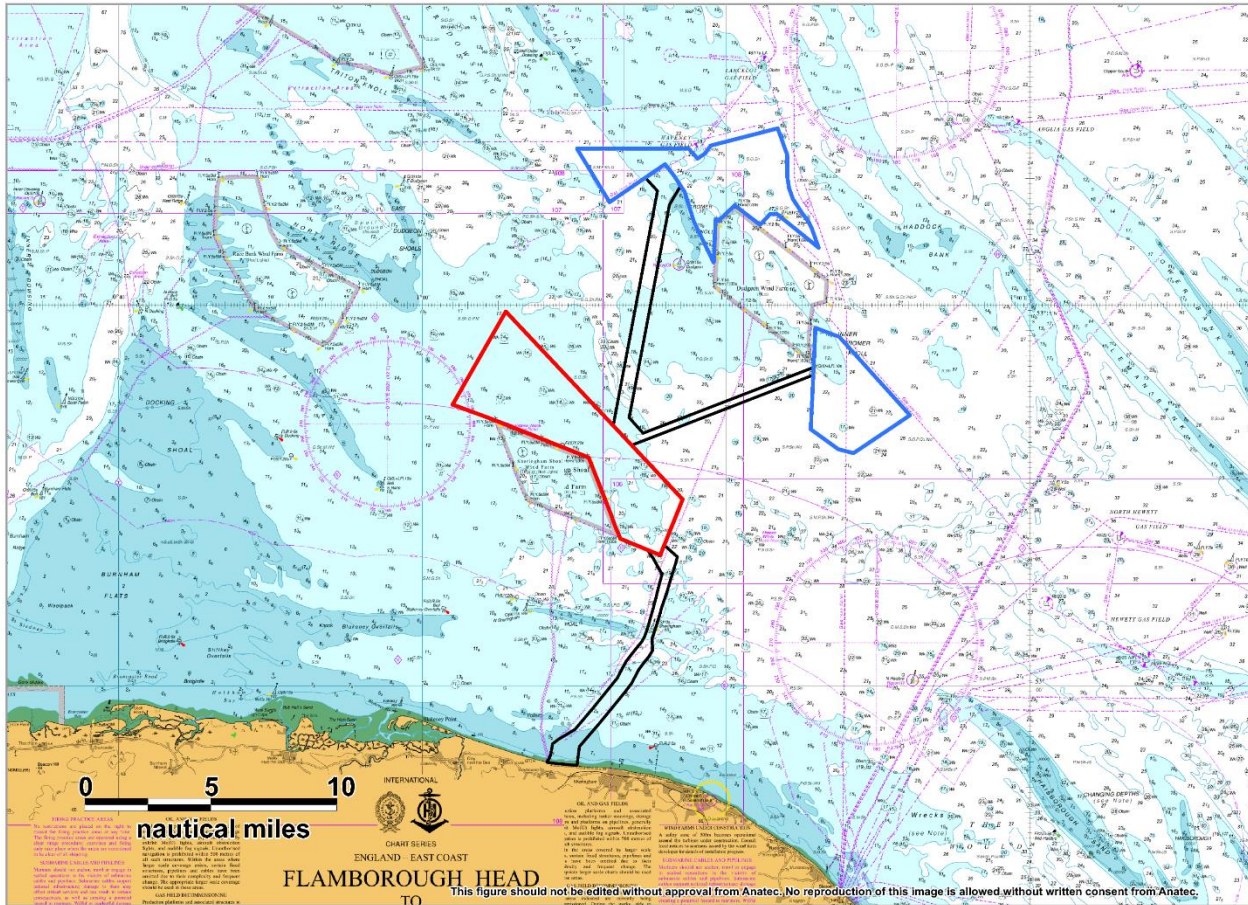
Introduction to DEP & SEP





Project Overview

- DEP located 13.4nm from shore and covers an area of approximately 30nm².
- SEP located 7.3nm from shore and covers an area of approximately 27nm².



Offshore Export Cable Corridor



Legend	
	DEP Wind Farm Site
	SEP Wind Farm Site
	Offshore Cable Corridor
PROJECT NAME Sheringham and Dudgeon Extension Projects	
FIGURE TITLE Cable Corridor	
REVISION: REV 00	DATE: 30/09/2020
	
CO-ORDINATE SYSTEM Mercator WGS84	
DRAWN: DS	CHECKED: SW

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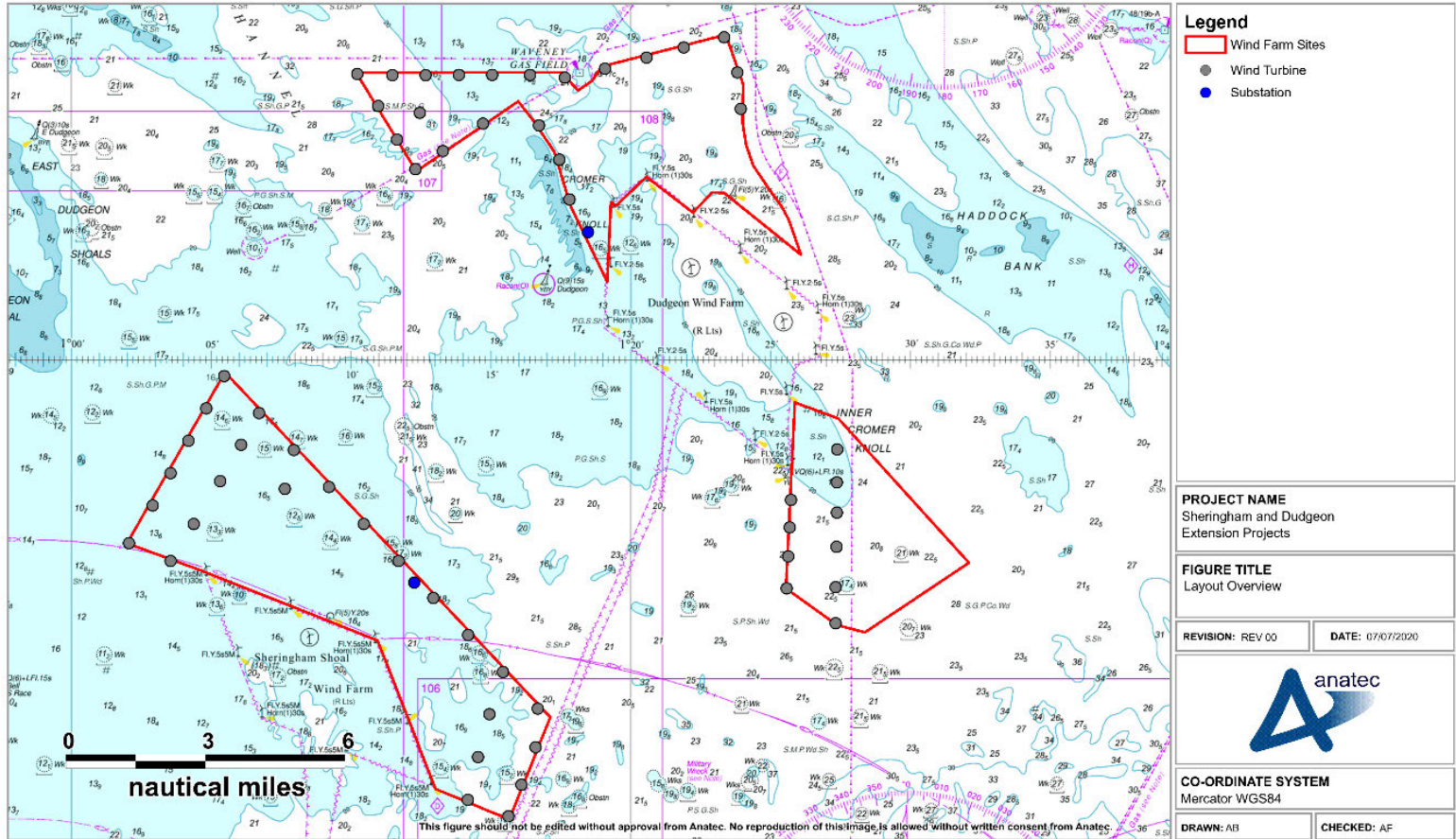
Project Update

- PEIR (including NRA and shipping and navigation chapter) consultation undertaken between April and June 2021.
- Project currently considering responses received under Section 42 and how feedback should be incorporated.
- Additional engagement is being undertaken where necessary.
- Submission of final ES including the NRA intended by end of 2021.

Layout Design Process

- The layout design process will be influenced by various constraints associated with the existing environment (e.g., ground conditions) – the extent of some constraints will be confirmed once pre-construction surveys have been undertaken.
- All input by relevant stakeholders (including but not limited to shipping and navigation) will also be considered, with any conflicting preferences explored and discussed with stakeholders.
- A Rochdale Envelope approach will be taken in the consent application in terms of site boundary/parameters to ensure flexibility for a safe and viable layout.
- The NRA therefore considers a worst case i.e., maximum number of structures and full site build out within the red line boundary.
- Note that the DCO will include a condition which requires final detailed layout to be approved by the MMO in consultation with the MCA and Trinity House.

Worst Case Layout Assessed in NRA



Project Infrastructure (MDS)

Infrastructure	Max Number		Details
	DEP	SEP	
Turbines	32	26	<ul style="list-style-type: none"> Worst case is Jacket foundation, 28x28m Up to 300m rotor diameter Minimum 26m blade clearance above HAT
Substations	1	1	<ul style="list-style-type: none"> Maximum of one per extension Up to 70x40m dimensions topside
Cables	1	1	<ul style="list-style-type: none"> Up to 43nm of export cable Length of array cables will depend on layout Target burial depths - MCZ: 0-0.3m, areas of sandwaves: up to 20m, all other areas: 0.5-1.0m

Consultation Summary

- Scoping Opinion
- Various direct meetings including MCA, Trinity House, and CoS
- Regular Operator outreach
- Recreational consultation via RYA and CA
- Hazard Workshop

Input received as part of Section 42 consultation will be incorporated into final NRA.

Risk Assessment Methodology

Aims and Objectives

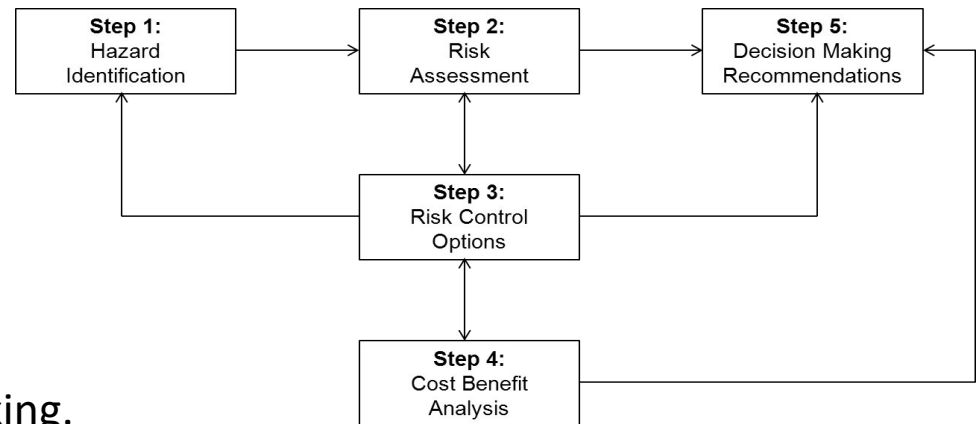
- Consultation with local users (or their representatives);
- Input into baseline;
- Identification of hazards for local users;
- Assessment of what risk those hazards may pose;
- Introduction of control measures (mitigations) available to reduce the risk to As Low As Reasonably Practicable (ALARP); and
- Creation of a hazard log which will be used to inform the NRA.

Formal Safety Assessment

- Impact on navigation will be assessed quantitatively in the NRA in line with MGN 654.
- An impact assessment will be carried out in line with the IMO Formal Safety Assessment (FSA) and relevant EIA guidance.

- The FSA requires:

- Identification of hazards;
- Risk analysis;
- Risk control (mitigation) options;
- Cost benefit assessment; and
- Recommendations for decision making.



- In order for the FSA to be effective the process needs to be repeated until risks are considered ALARP by the decision makers.

Hazard Workshop Overview

- Objective of Hazard Workshop is to identify and review potential hazards associated with the development of DEP and SEP.
- Navigational hazards present for following receptors will be identified:
 - Commercial vessels – cargo (containerised and bulk), tanker and passenger;
 - Commercial ferries;
 - Oil & Gas related vessels and other commercial users;
 - Commercial fishing vessels; and
 - Recreational vessels.
- Group will consider hazards, including causes, consequences and mitigation measures (control measures) identified and confirm list is comprehensive.

Post Hazard Workshop

- Hazard log to be created following Hazard Workshop identifying:
 - Possible causes;
 - Most likely consequences;
 - Worst case consequences;
 - Risk ranking; and
 - Risk reduction measures.

Severity of Consequence:

Rank	Description	Definition			
		People	Property	Environment	Business
1	Negligible	No perceptible effect	No perceptible effect	No perceptible effect	No perceptible effect
2	Minor	Slight injury(s)	£10k – £100k	Tier 1 Local assistance required	Minor reputational impact – limited to users
3	Moderate	Multiple moderate or single serious injury	£100k – £1M	Tier 2 Limited external assistance required	Local reputation impacts
4	Serious	Serious injury or single fatality	£1M - £10M	Tier 2 Regional assistance required	National reputation impacts
5	Major	More than 1 fatality	>£10M	Tier 3 National assistance required	International reputational impacts

Frequency of Occurrence:

Rank	Description	Definition
1	Negligible	<1 occurrence per 10,000 years
2	Extremely Unlikely	1 per 100 – 10,000 years
3	Remote	1 per 10 – 100 years
4	Reasonably Probable	1 per 1 – 10 years
5	Frequent	Yearly

Post Hazard Workshop

- Tolerability matrix to be used to determine risk level:

Severity of Consequences	1 (Negligible)	Green	Green	Green	Green	Orange
	2 (Minor)	Green	Green	Green	Orange	Orange
	3 (Moderate)	Green	Green	Orange	Orange	Red
	4 (Major)	Orange	Orange	Orange	Red	Red
	5 (Catastrophic)	Orange	Orange	Red	Red	Red
		1	2	3	4	5
		Frequency of Occurrence				

Green	Broadly Acceptable (low risk)
Orange	Tolerable (intermediate risk)
Red	Unacceptable (high risk)

Examples of Proposed Mitigations

- MCA MGN 654 compliance
- Appropriate marking on Admiralty charts
- Promulgation of information as required (e.g., Notice to Mariners, Kingfisher bulletin)
- Buoyed construction area in agreement with Trinity House
- Application for safety zones during construction and periods of major maintenance
- Marine coordination and communication to manage project vessel movements
- Marking and lighting in agreement with Trinity House (in line with IALA O-139)
- Blade clearance of at least 22m above Mean High Water Springs (in line with RYA Requirements)
- Guard vessel(s) if identified as necessary via risk assessment
- Cable burial risk assessment

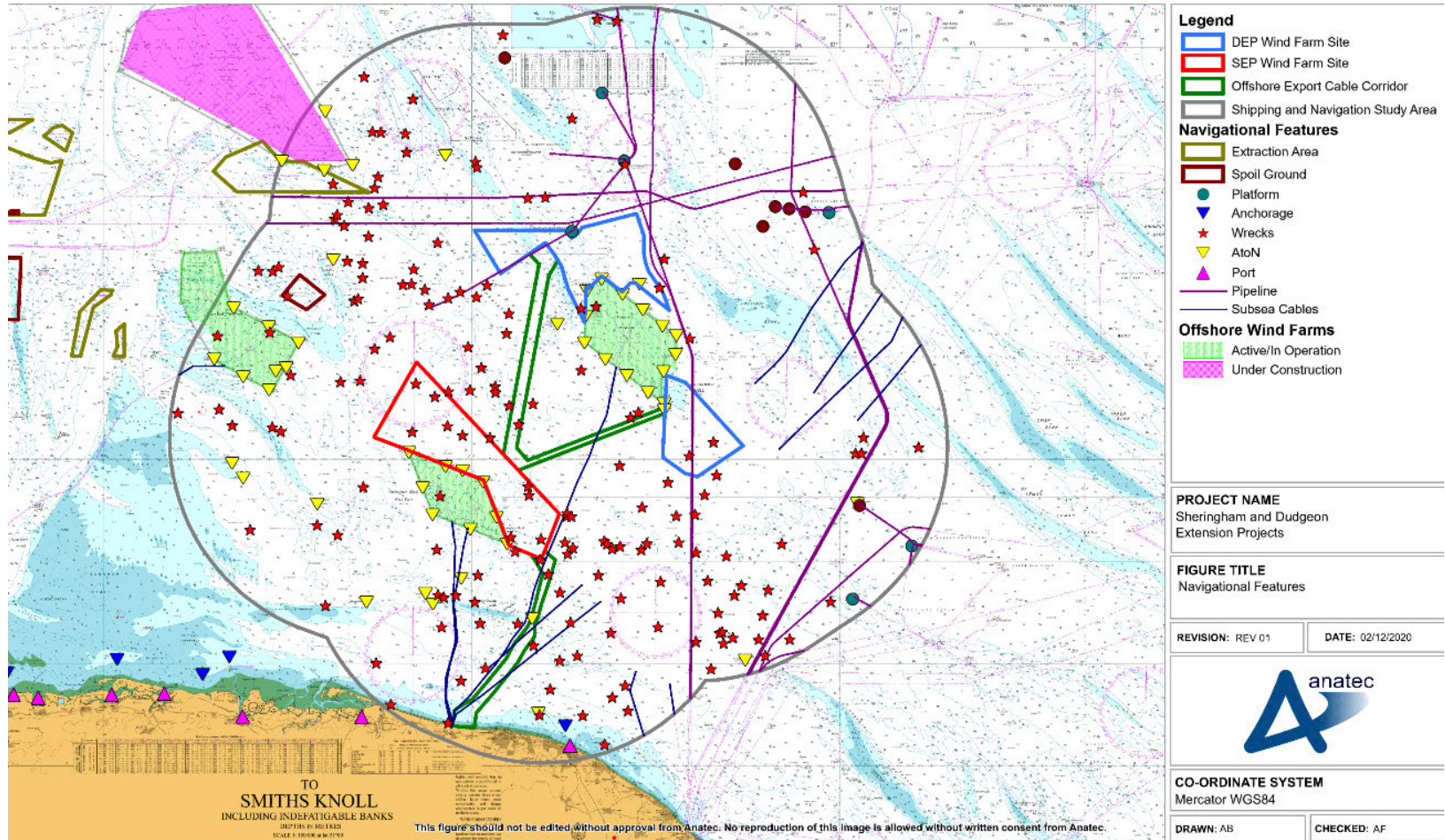
Likely Hazards

- Displacement of existing routes/activity
- Increased encounters and collision risk with third party vessels and project vessels
- Increased collision risk
- Reduction of under keel clearance
- Increased anchor interaction risk
- Interference with marine navigation, communication and position fixing equipment
- Reduction of emergency response capability including SAR resources

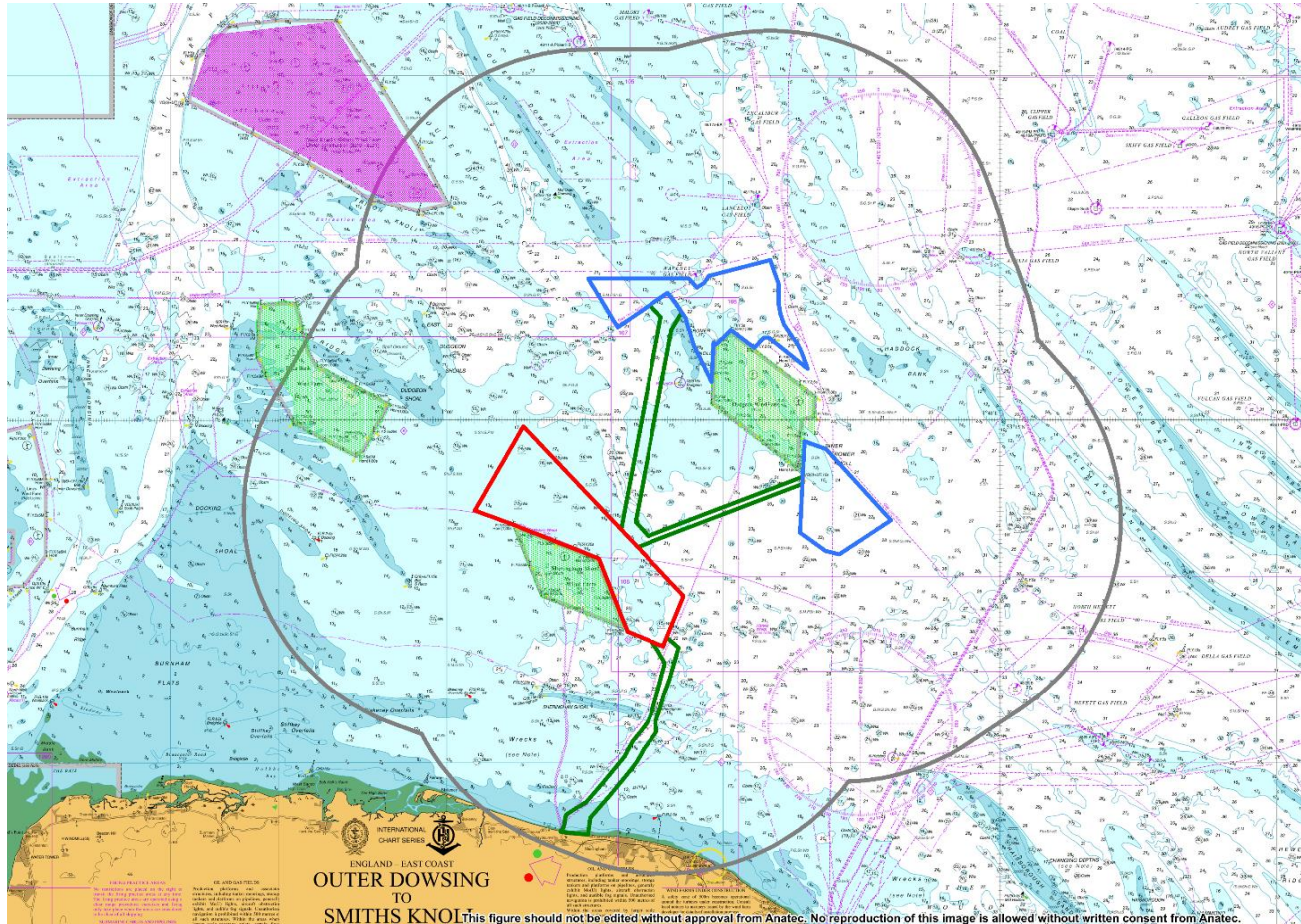
Note: Commercial risk relating to displacement and port access are considered separately (not in the NRA as not a navigational safety issue)

Baseline Features

Navigational Features - Overview



Navigational Features - OWFs



Legend

- DEP Wind Farm Site
- SEP Wind Farm Site
- Offshore Export Cable Corridor
- Shipping and Navigation Study Area

Offshore Wind Farms

- Active/In Operation
- Under Construction

PROJECT NAME
Sheringham and Dudgeon
Extension Projects

FIGURE TITLE
Offshore Wind Farms

REVISION: REV 01

DATE: 19/07/2021



CO-ORDINATE SYSTEM
Mercator WGS84

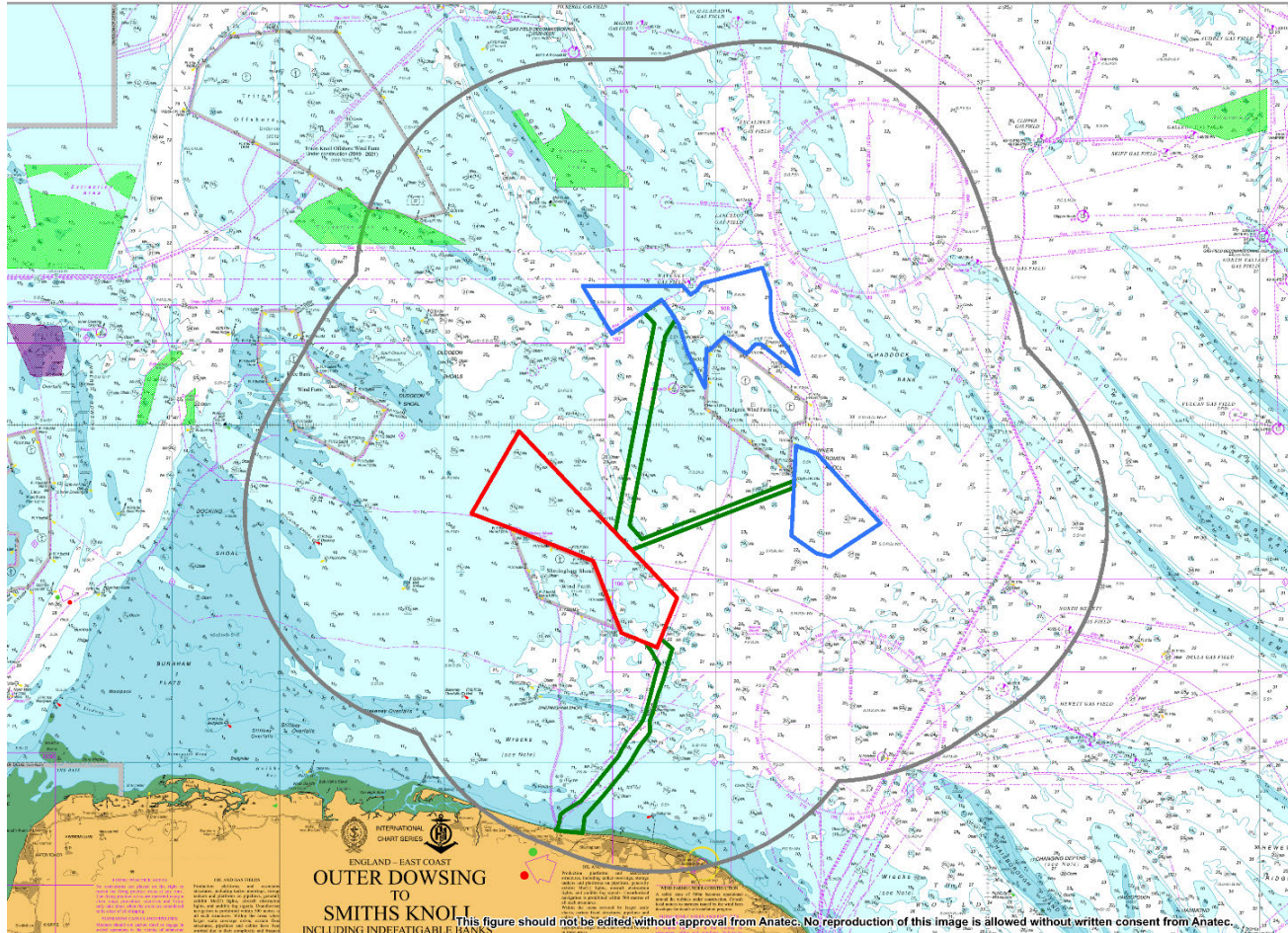
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ENGLAND - EAST COAST
OUTER DOWSING
TO
SMITHS KNOL

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Navigational Features - Dredging



Legend

- DEP Wind Farm Site
- SEP Wind Farm Site
- Offshore Export Cable Corridor
- Shipping and Navigation Study Area

Marine Aggregate Dredging Zone

- Exploration and Option Area
- Production Agreement Area

PROJECT NAME
Sheringham and Dudgeon
Extension Projects

FIGURE TITLE
Marine Aggregate Dredging Areas

REVISION: REV 00

DATE: 22/07/2021



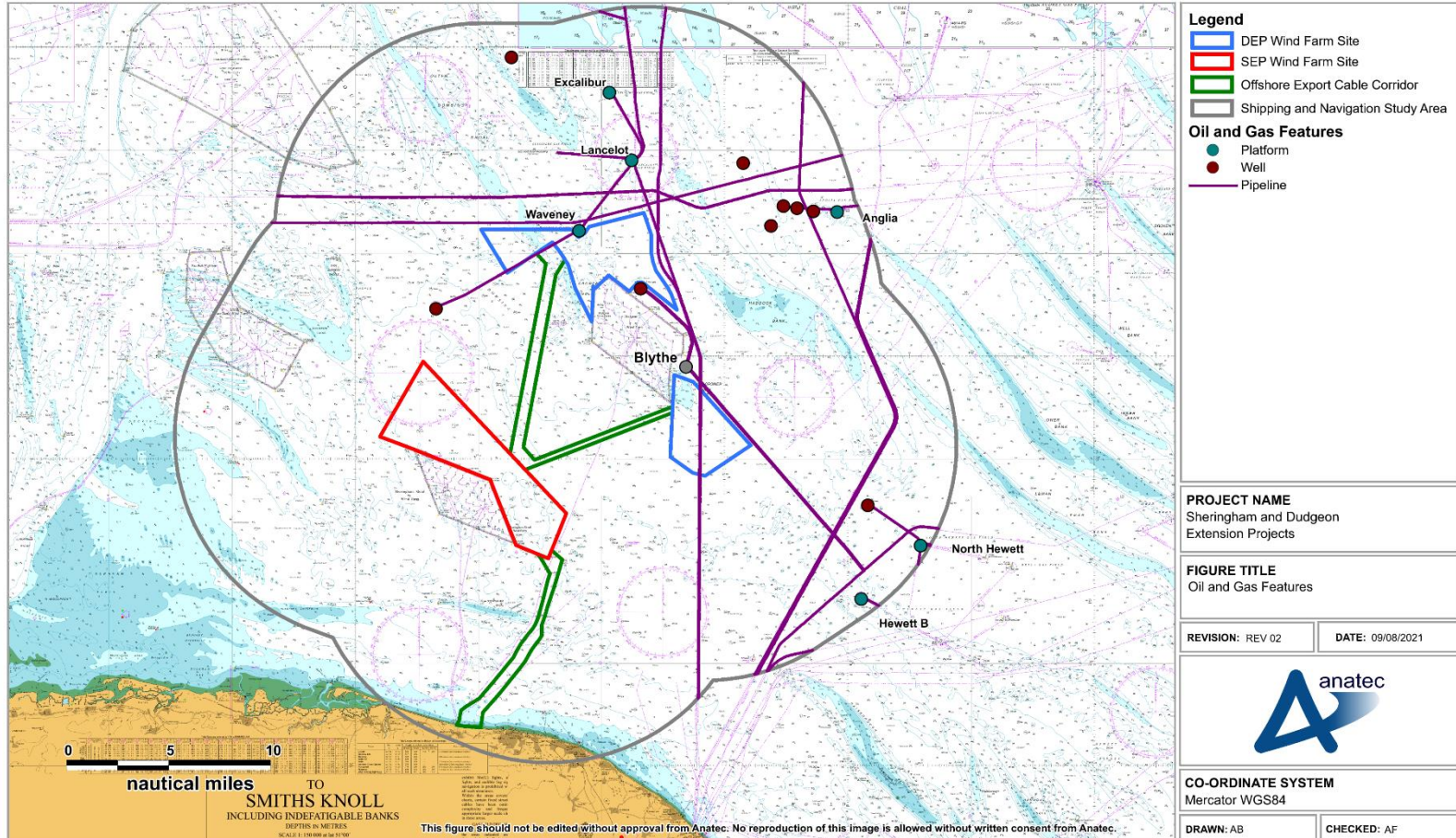
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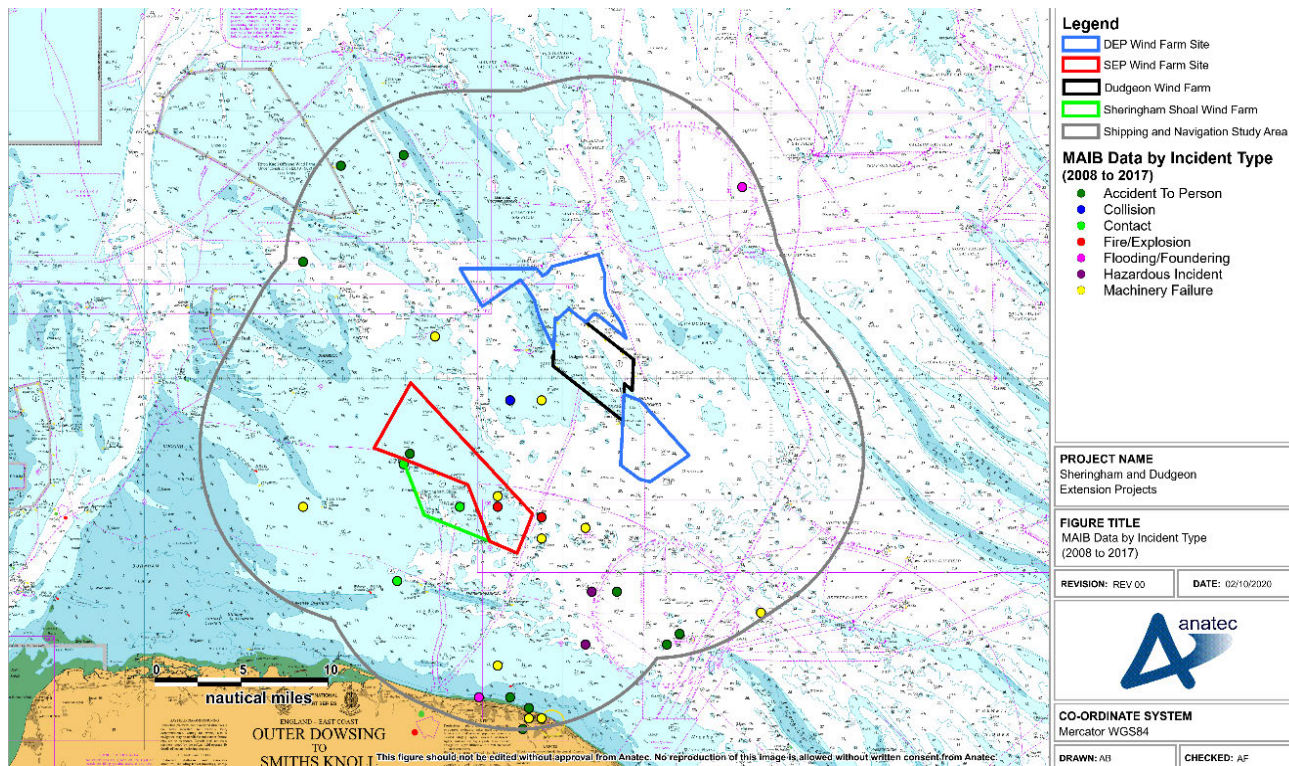
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Navigational Features – Oil and Gas



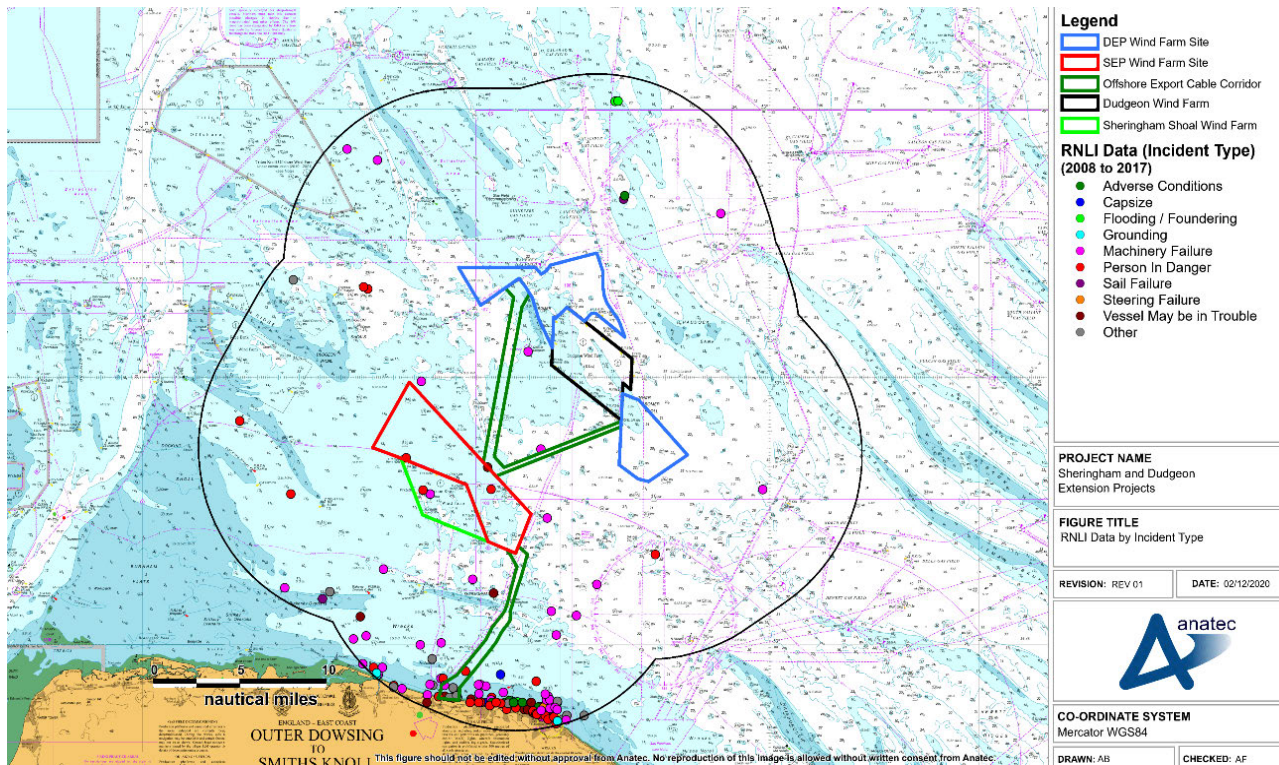
MAIB Incident Data (2008-2017)



- Average of three incidents per year in study area;
- Machinery failure (38%) and accident to person (31%) most common;
- Three incidents within SEP array area (accident to person, fire/explosion, machinery failure); and
- No incidents within DEP array area

Note the final NRA will consider a total of 20 years of MAIB data.

RNLI Incident Data (2008-2017)



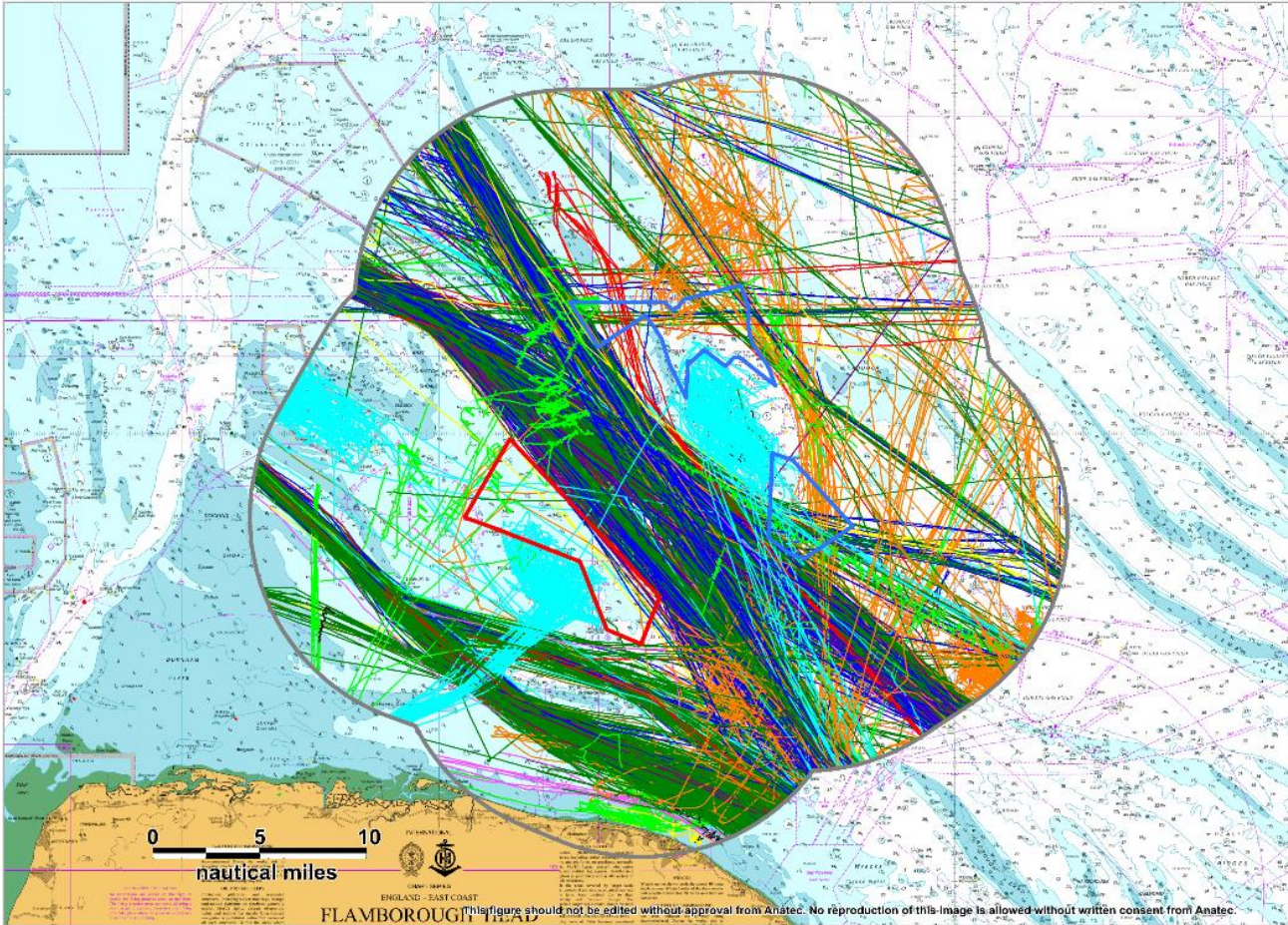
- Average of 15 incidents per year in study area (majority coastal);
- Machinery failure (36%) and person in danger (32%) most common;
- Two incidents within SEP array area (both classed as person in danger); and
- No incidents within DEP array area

















Vessel Traffic Data

Data Collection

- PEIR NRA based on the following marine traffic data sets:
 - 14 days AIS, radar and visual observation data collected during July / Aug 2020
 - One year AIS data spanning 2019.
- Final NRA will include additional 14 days of AIS, radar and visual observation survey data collected during Jan / Feb 2021
- Anatec internal ShipRoutes database
- BMAPA transit routes
- RYA Coastal Atlas
- Consultation feedback

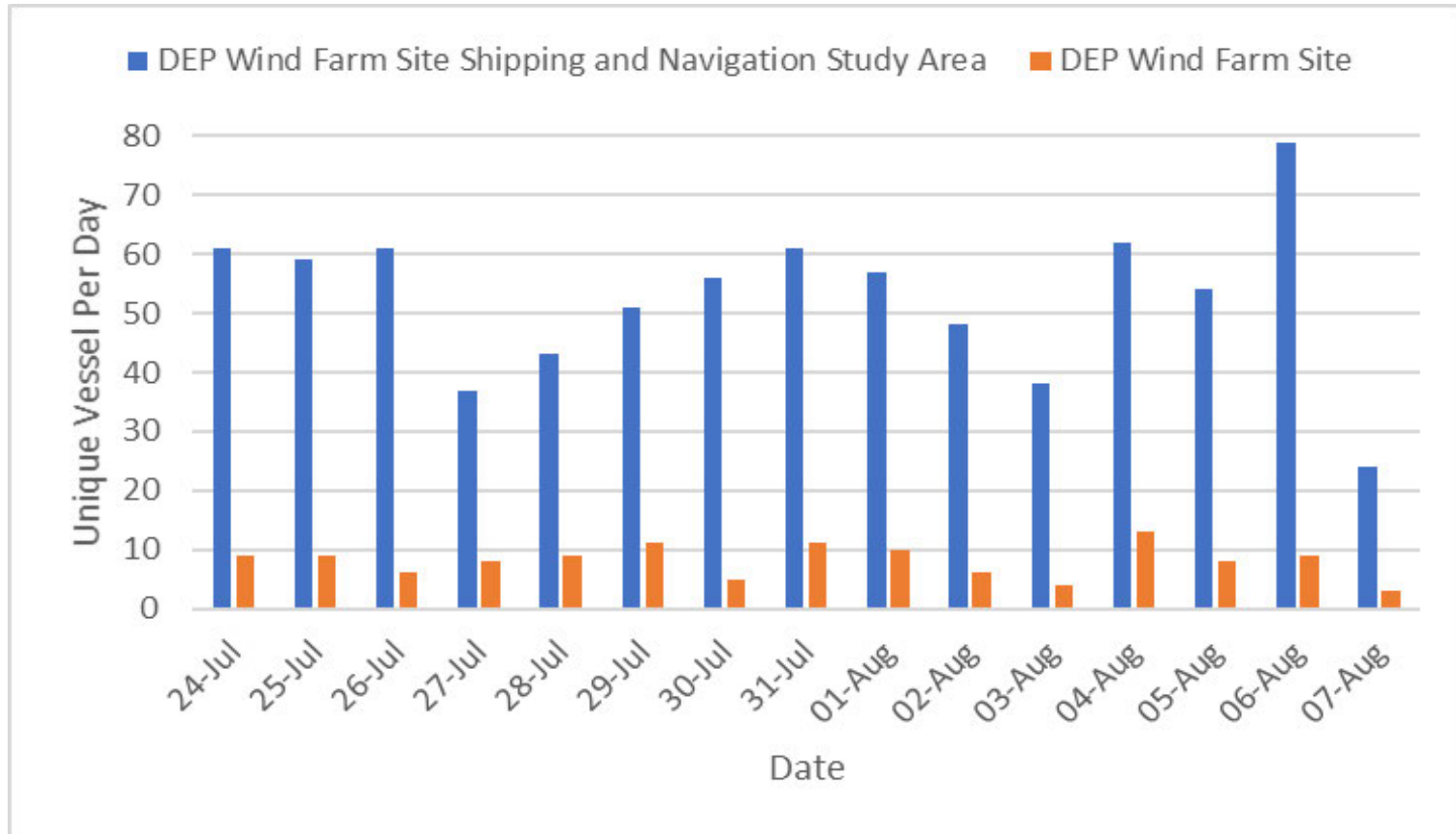
Vessel Type (28 Days)



Legend	
	DEP Wind Farm Site
	SEP Wind Farm Site
	Shipping and Navigation Study Area
Vessel Type	
	Unspecified
	Fishing
	Military
	Dredger/Subsea
	Tug
	Passenger
	Cargo
	Tanker
	Other
	Recreational
	Oil & Gas
	Wind Farm
PROJECT NAME Sheringham and Dudgeon Extension Projects	
FIGURE TITLE 28 Days AIS & Radar (Vessel Type)	
REVISION: REV 01	DATE: 01/12/2020
	
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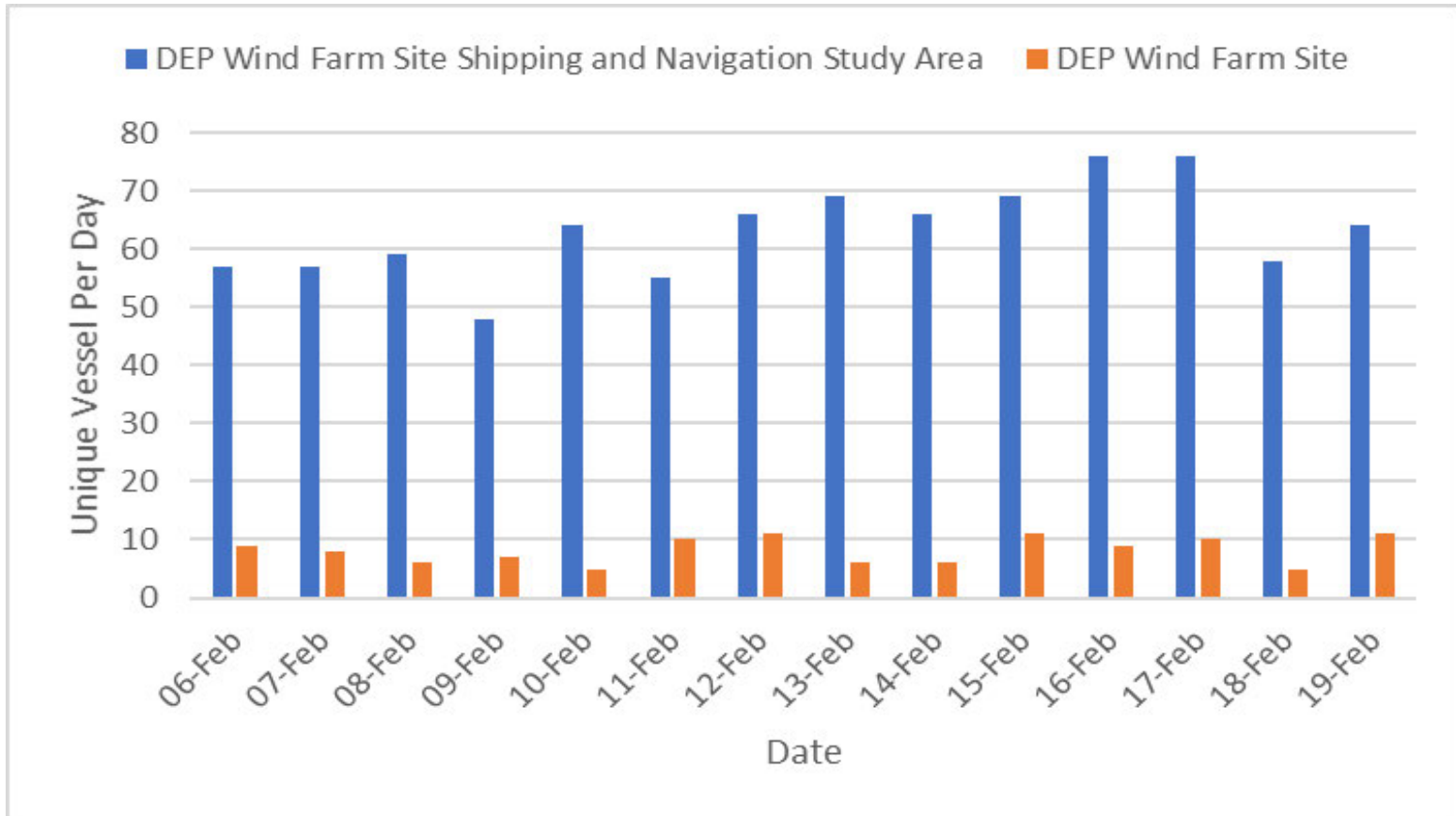
DEP Summer Vessel Counts



Study Area: 54 per day

Site: 8 per day

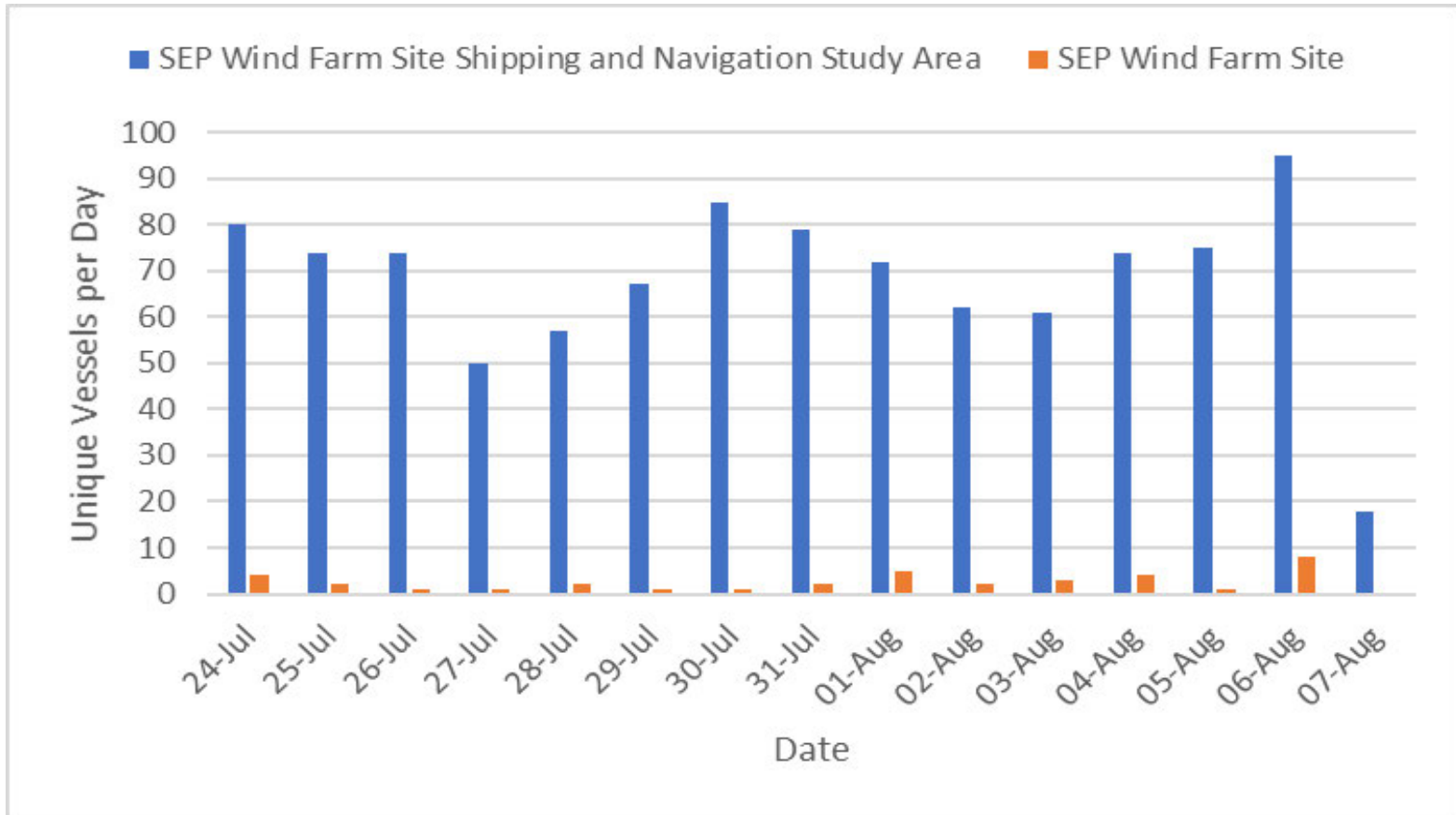
DEP Winter Vessel Counts



Study Area: 62 per day

Site: 8 per day

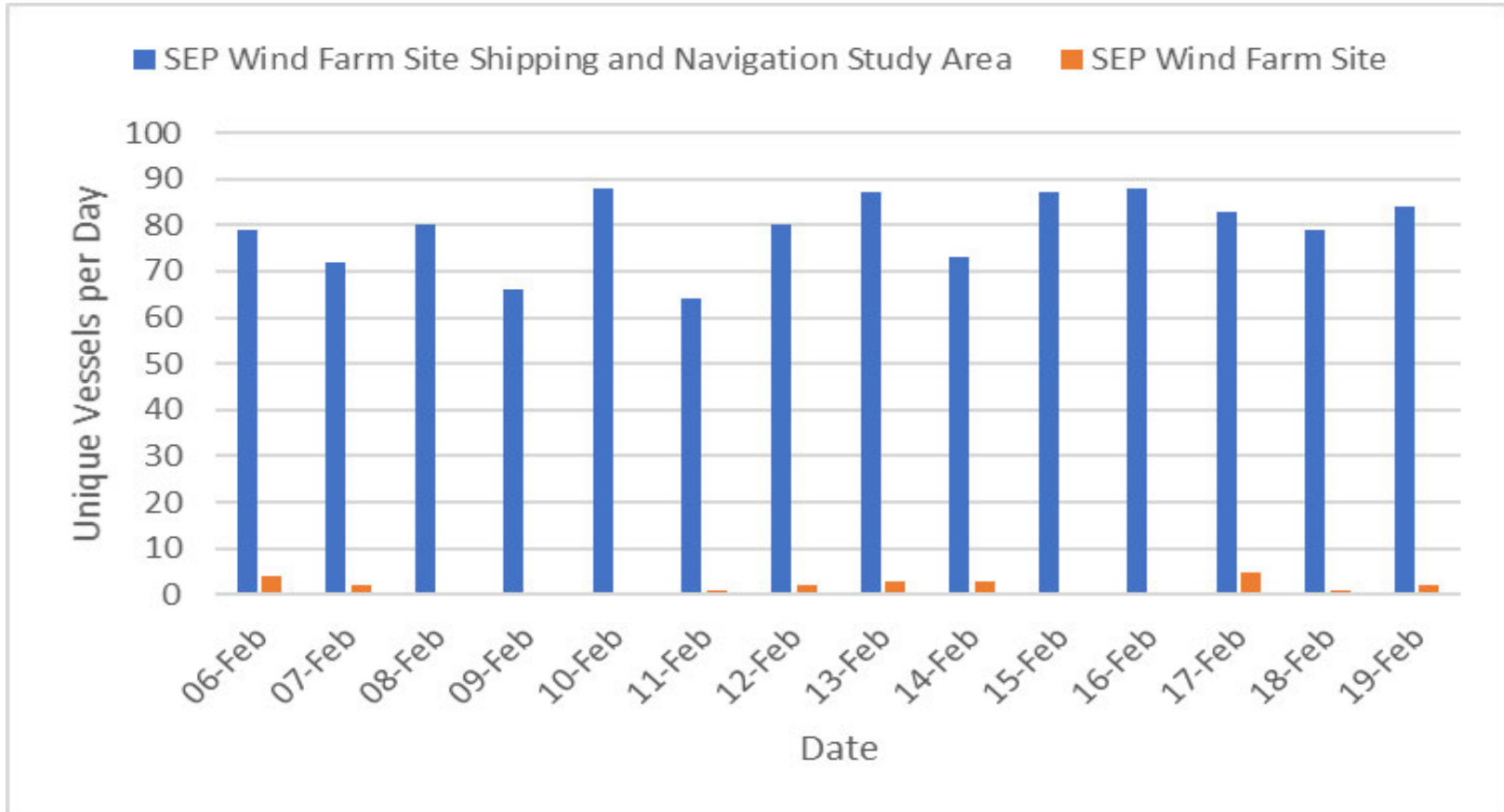
SEP Summer Vessel Counts



Study Area: 73 per day

Site: 2-3 per day

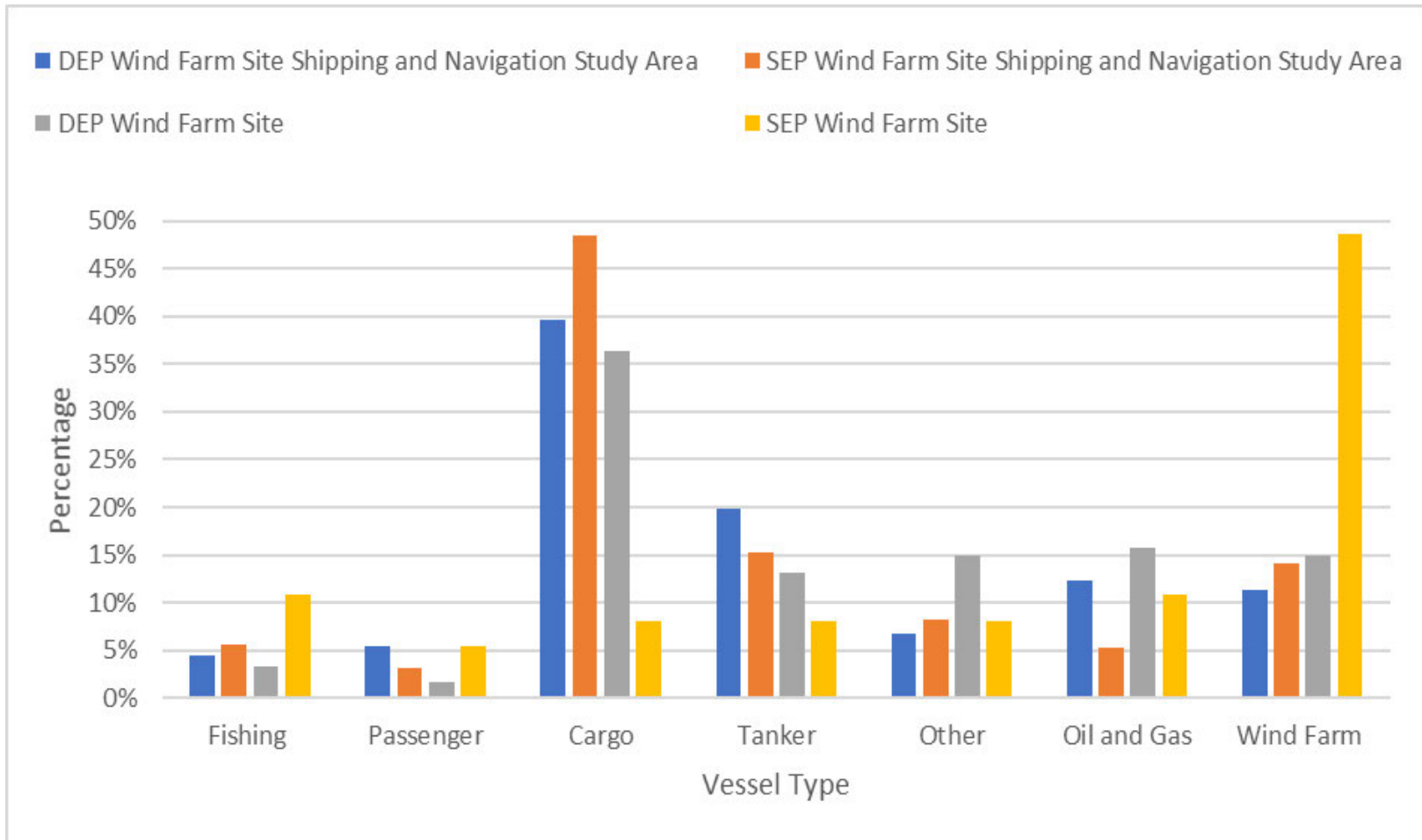
SEP Winter Vessel Counts



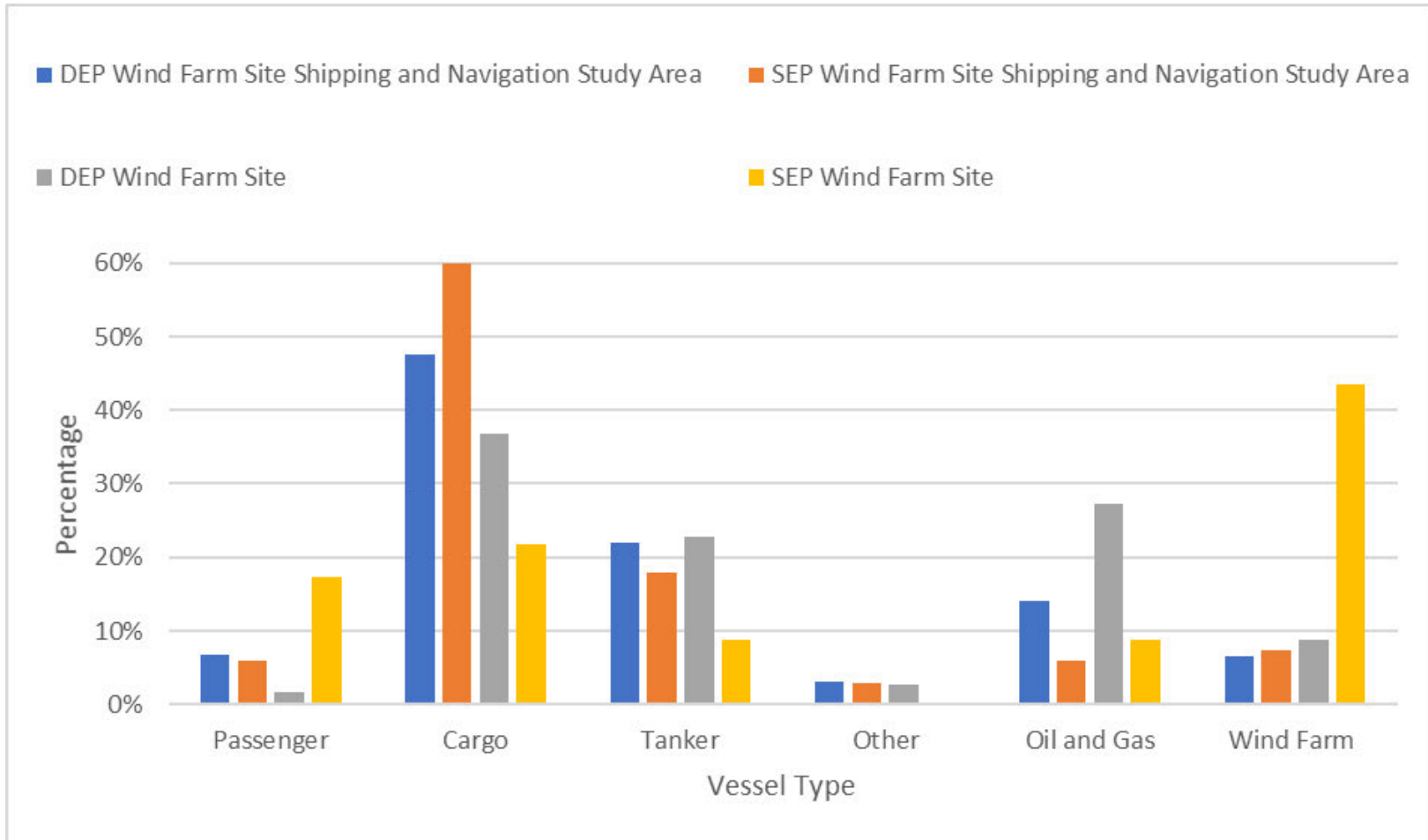
Study Area: 77 per day

Site: 2 per day

Summer Vessel Type Distribution

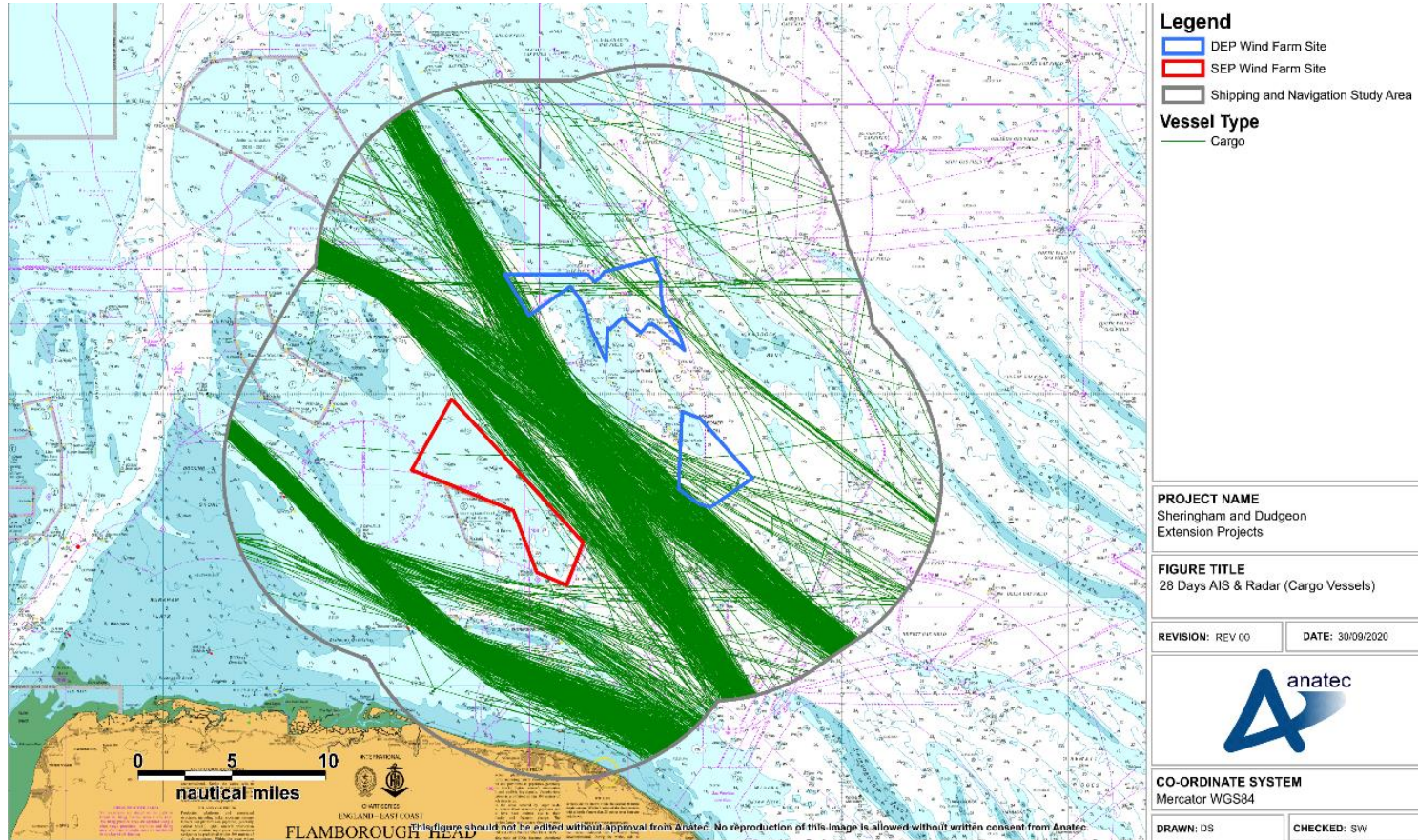


Winter Vessel Type Distribution



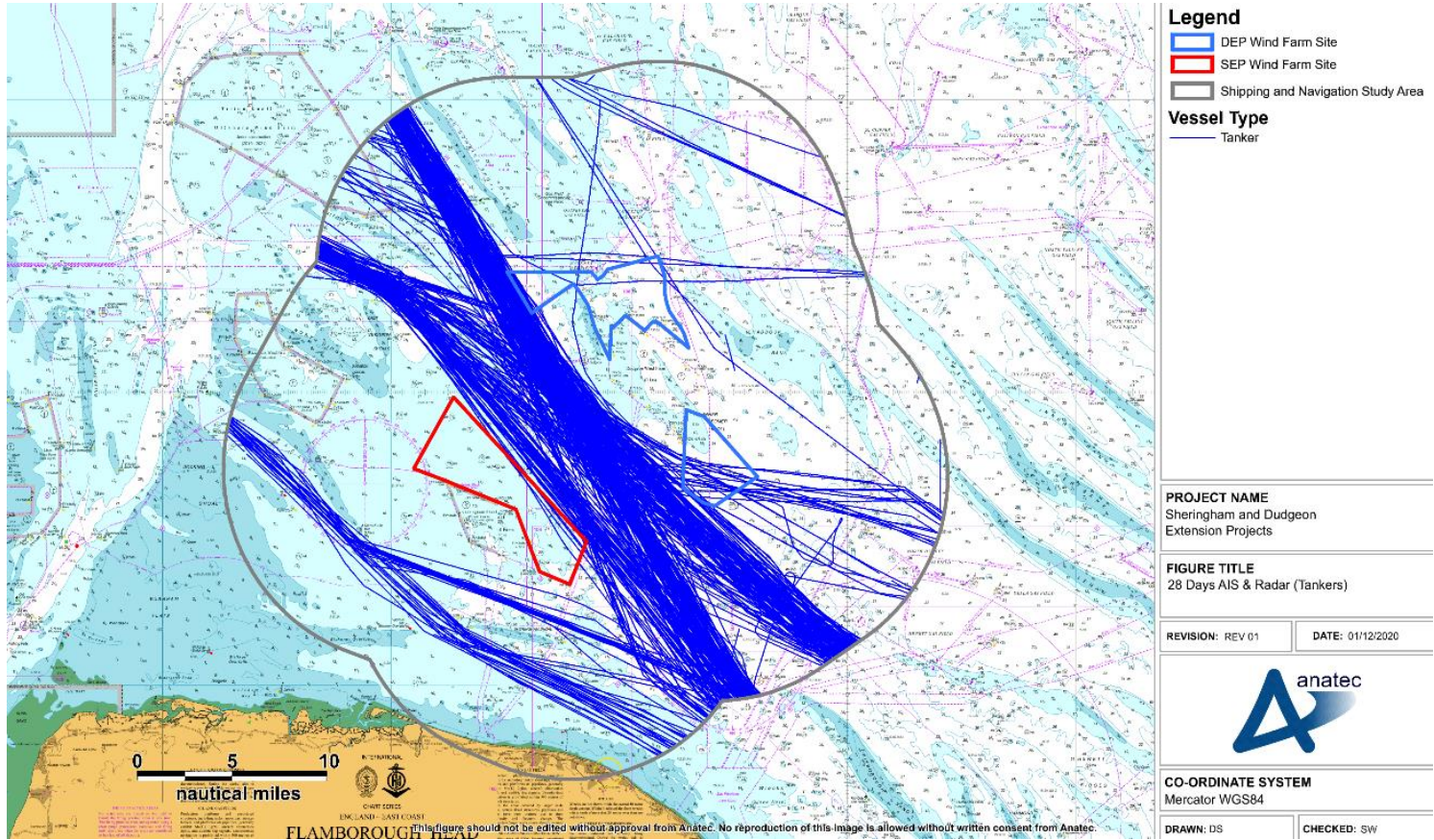
Commercial Vessels – Cargo (containerised and bulk), Tanker, and Passenger

Cargo Vessels – 28 Days



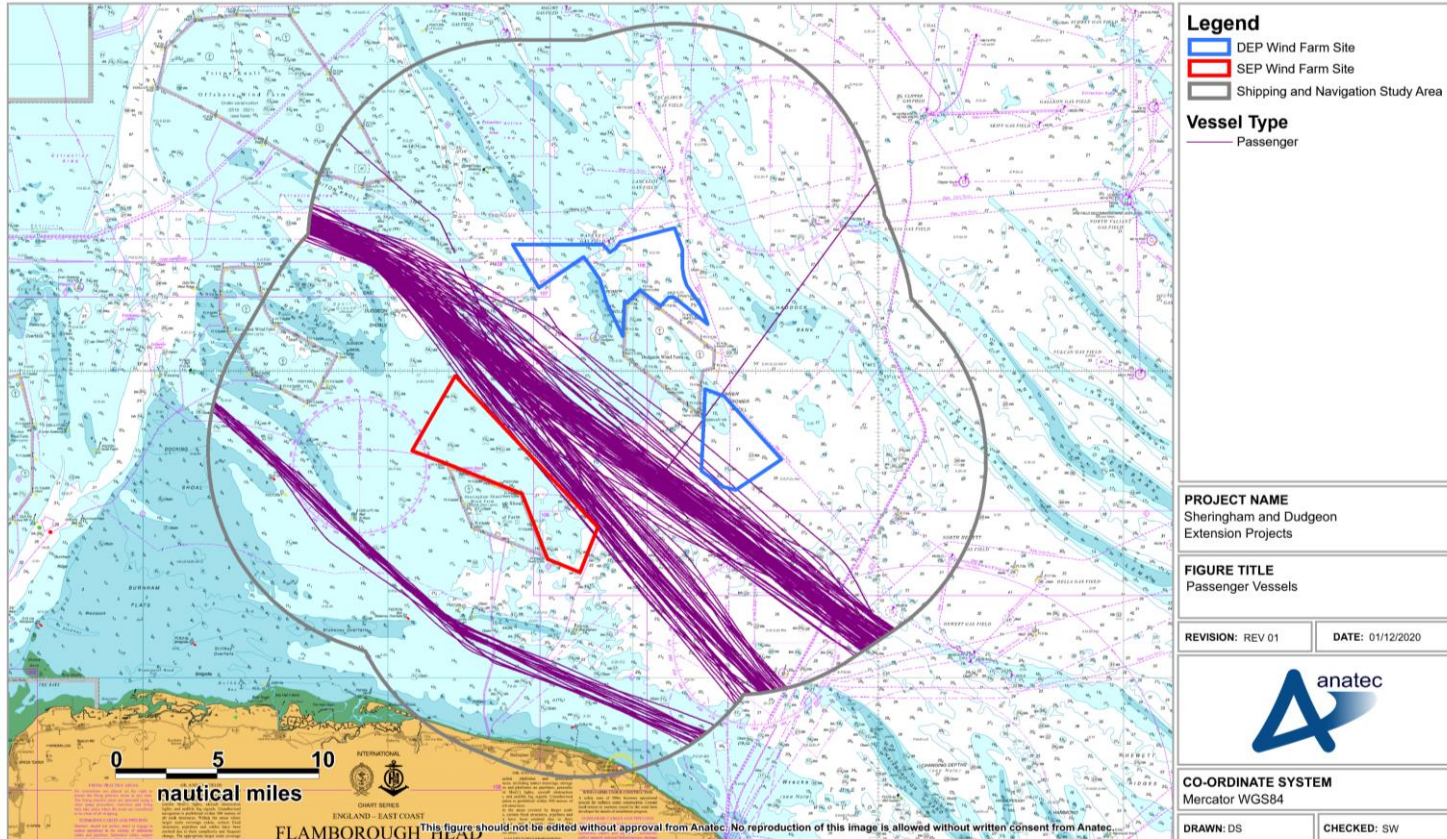
Average of 44 per day

Tankers – 28 Days



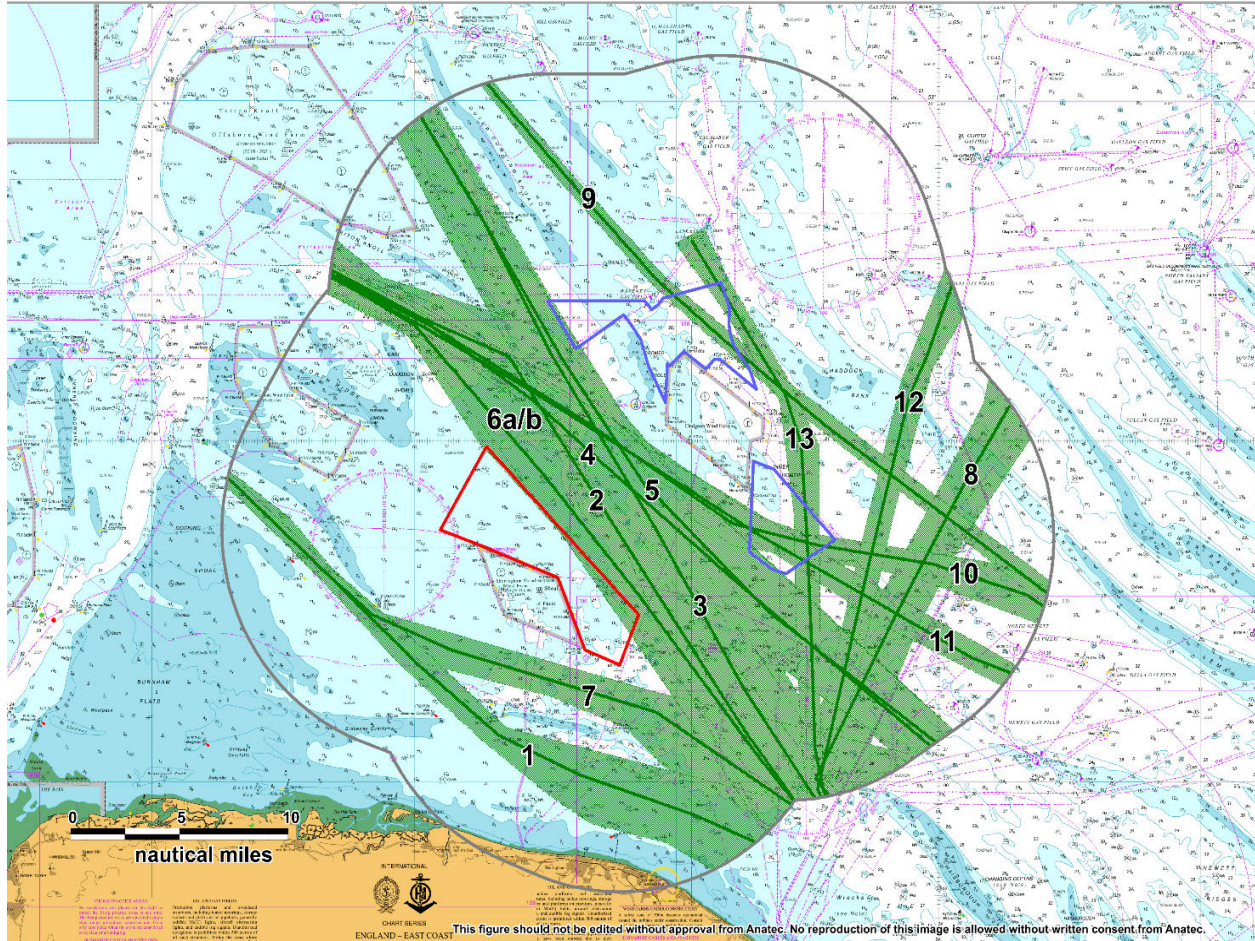
Average of 13 per day

Passenger Vessels – 28 Days



Average of 4 per day

Main Routes



Legend

- DEP Wind Farm Site
- SEP Wind Farm Site
- Shipping and Navigation Study Area

Vessel Routing

- Main Route
- 90th Percentile

PROJECT NAME
A4523 Dudgeon and Sheringham Shoal Extensions - Traffic Survey

FIGURE TITLE
28 Days AIS & Radar Vessel Density Heat Map

REVISION: REV 00	DATE: 28/09/2020
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CO-ORDINATE SYSTEM
Mercator WGS84

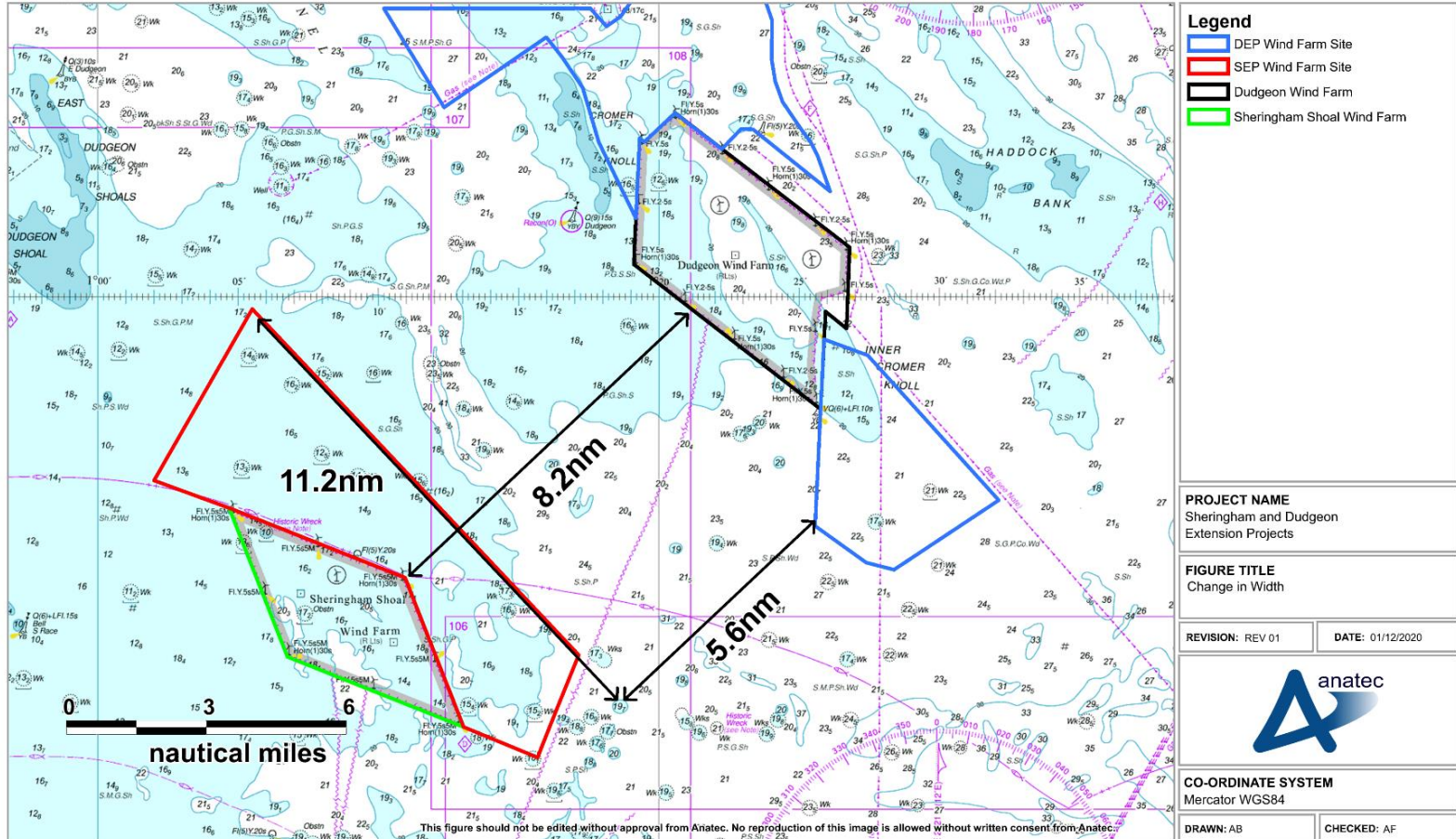
DRAWN: DS	CHECKED: SW
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CHART SERVICE ENGLAND - EAST COAST This figure should not be edited without approval from Anatec. No reproduction of this image is allowed without written consent from Anatec.

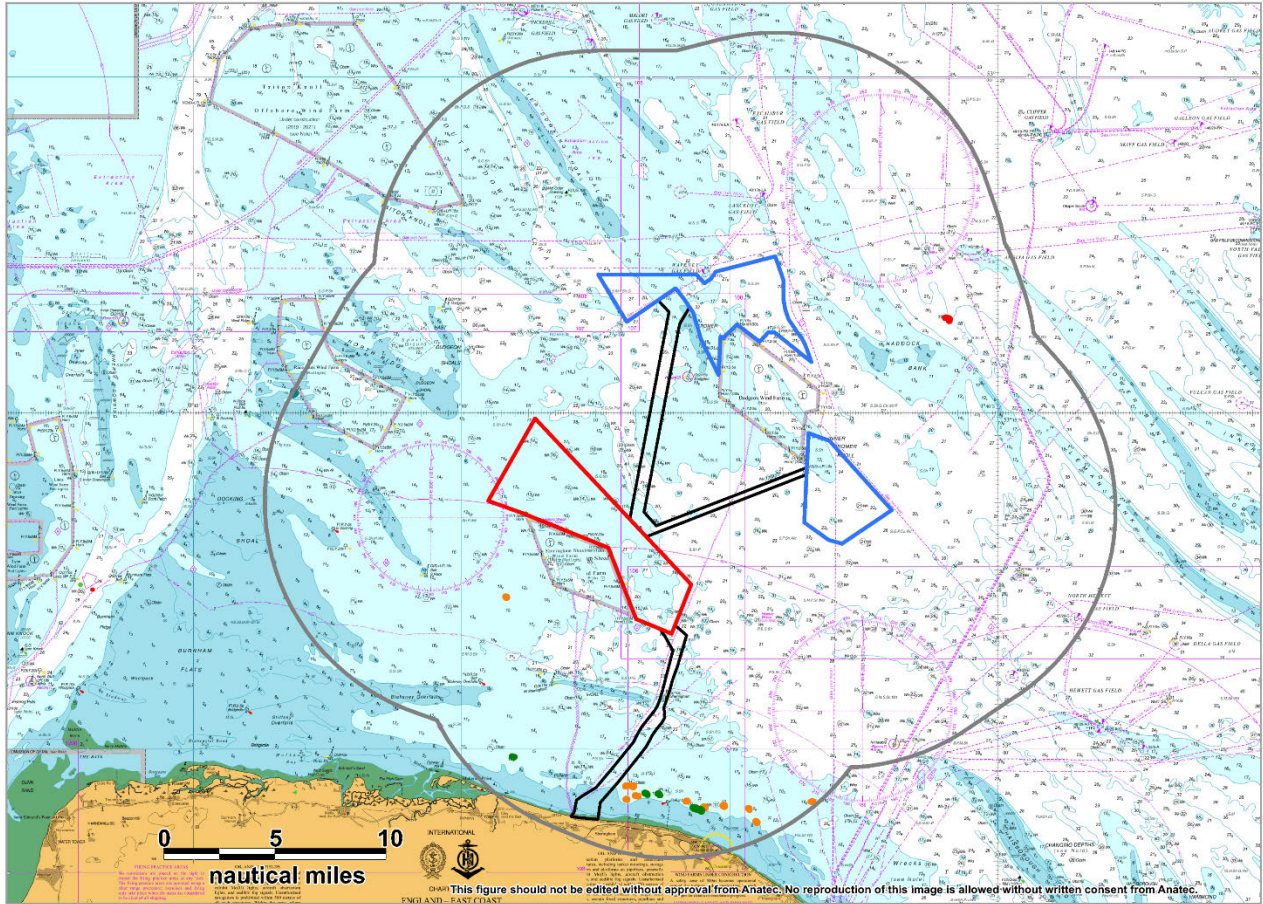
Main Route Details










Route	Terminus Ports	Vessels per Day
1	Humber (UK) / Rotterdam (Netherlands)	20
2	Humber (UK) / Rotterdam (Netherlands)	13
3	Tees (UK) / Zeebrugge (Belgium)	12
4	Humber (UK) / Rotterdam (Netherlands)	12
5	Tees (UK) / Rotterdam (Netherlands)	4
6a	Hull (UK) / Zeebrugge (Belgium)	2
6b	Hull (UK) / Rotterdam (Netherlands)	2
7	Humber (UK) / Rotterdam (Netherlands)	3
8	Great Yarmouth (UK) / (LOGGS) (UK waters)	2
9	Tees (UK) / Rotterdam (Netherlands)	1
10	Humber (UK) / Rotterdam (Netherlands)	< 1
11	Humber (UK) / Rotterdam (Netherlands)	< 1
12	Great Yarmouth (UK) / Clipper (UK waters)	< 1
13	Great Yarmouth (UK) / Lancelot (UK waters)	< 1

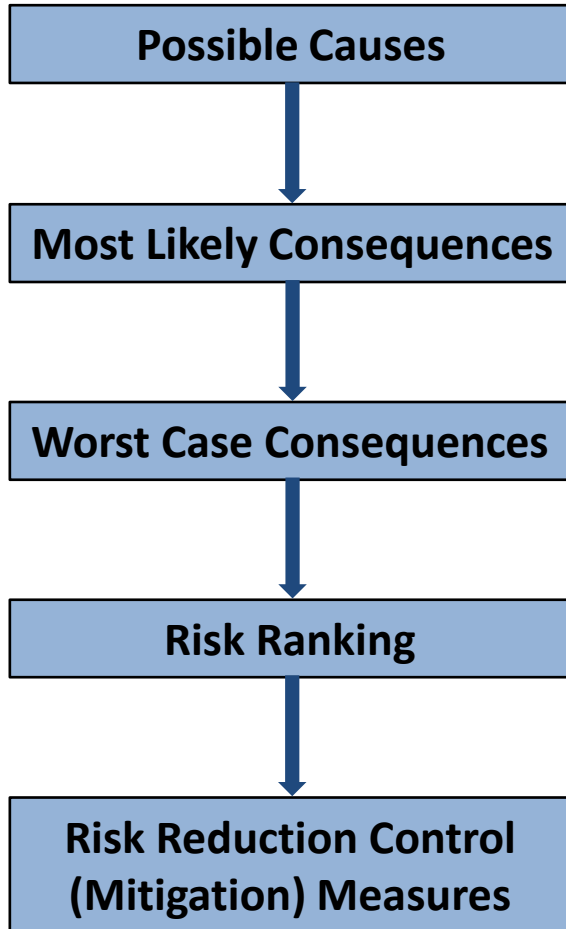
Change in Available Sea Room



Anchored Vessels



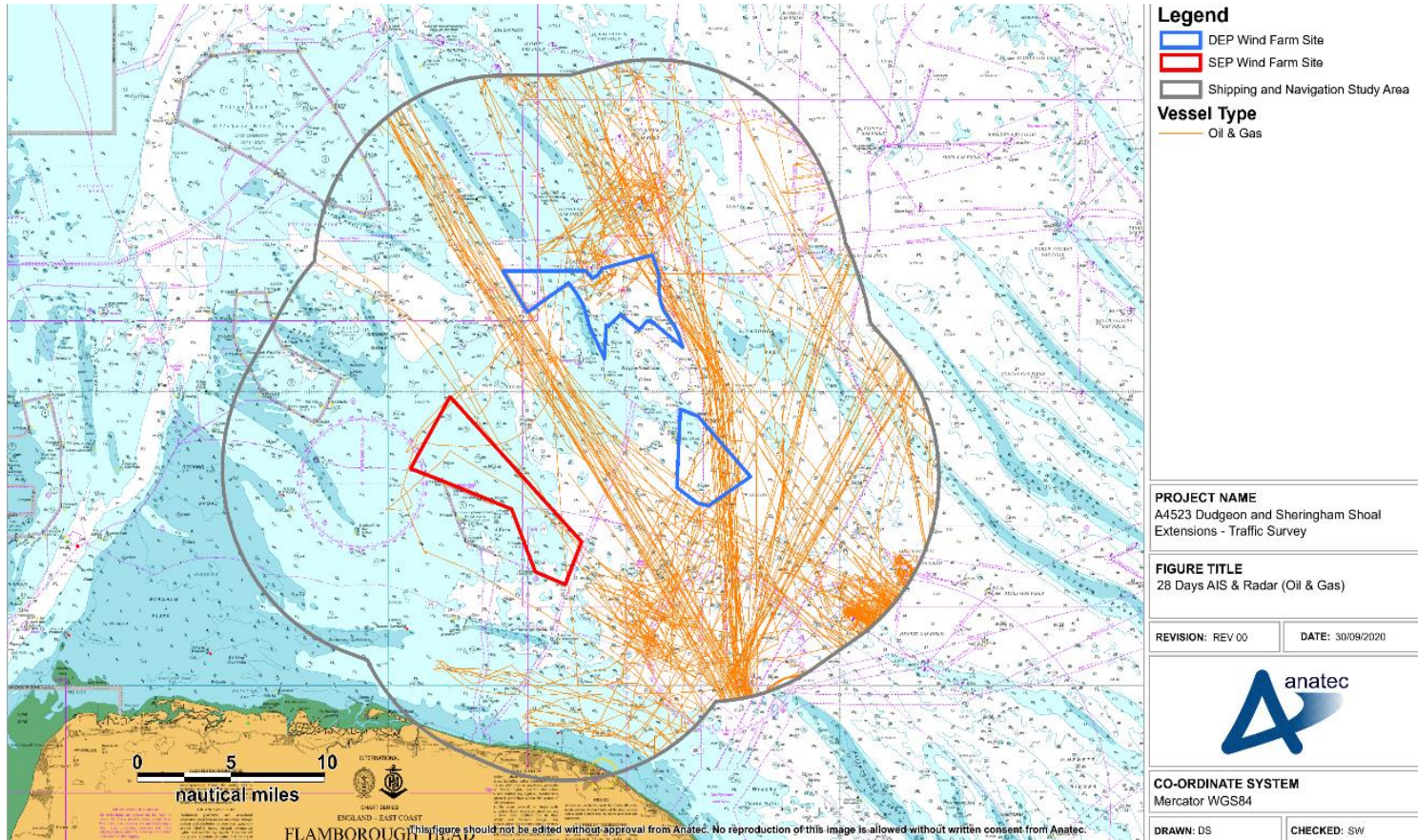
Legend	
	DEP Wind Farm Site
	SEP Wind Farm Site
	Shipping and Navigation Study Area
	Offshore Cable Corridor
Vessel Type	
	Dredger/Subsea
	Cargo
	Oil & Gas
	Wind Farm
PROJECT NAME Sheringham and Dudgeon Extension Projects	
FIGURE TITLE 28 Days AIS & Radar (Anchored Vessels)	
REVISION: REV 00	DATE: 30/09/2020
	
CO-ORDINATE SYSTEM Mercator WGS84	
DRAWN: DS	CHECKED: SW



Navigational hazards
associated with
Commercial Vessels –
cargo (containerised and bulk),
tanker, and passenger

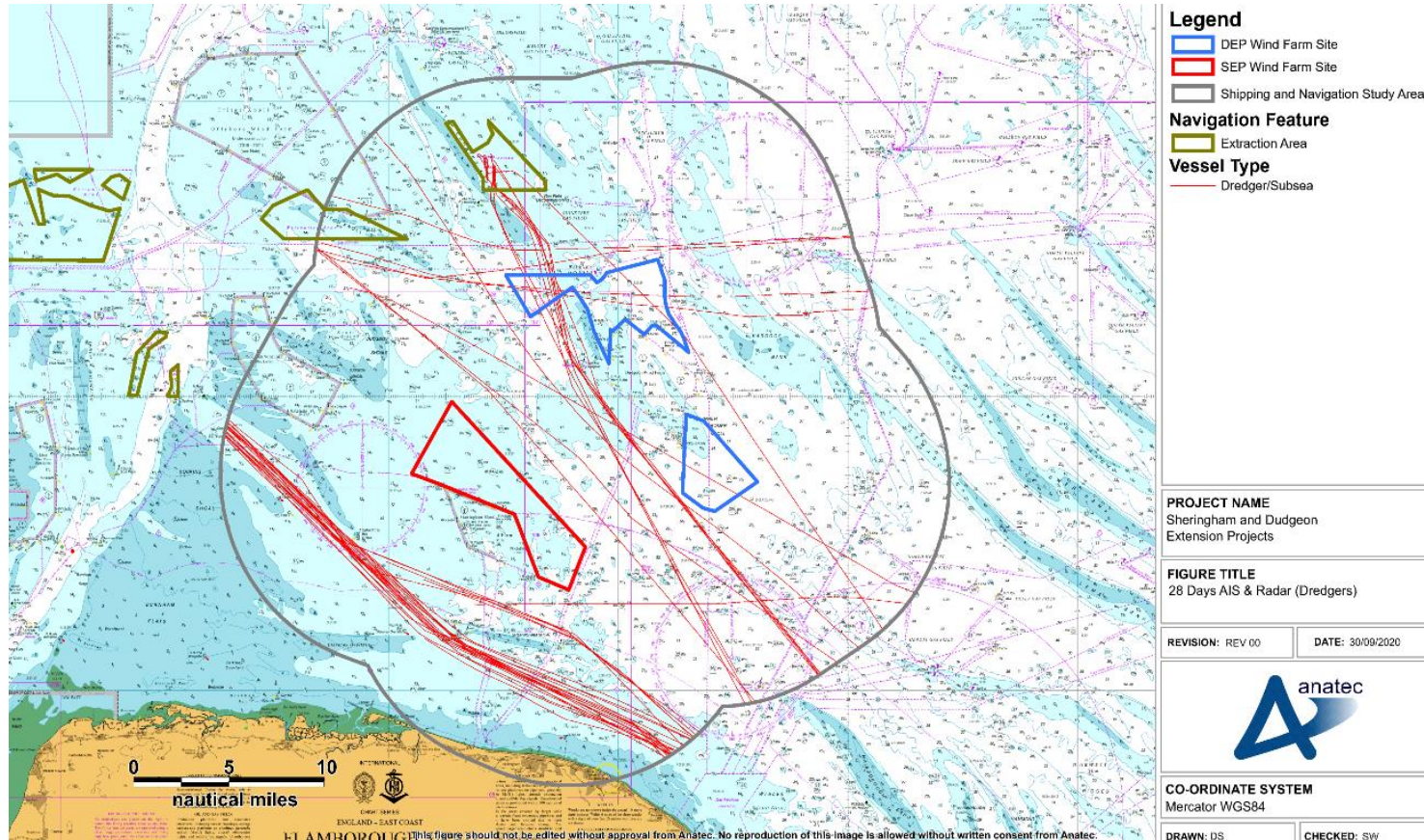
Other Commercial Users – Marine Aggregate Dredgers, Oil & Gas, and Wind Farm

Oil and Gas Vessels – 28 Days



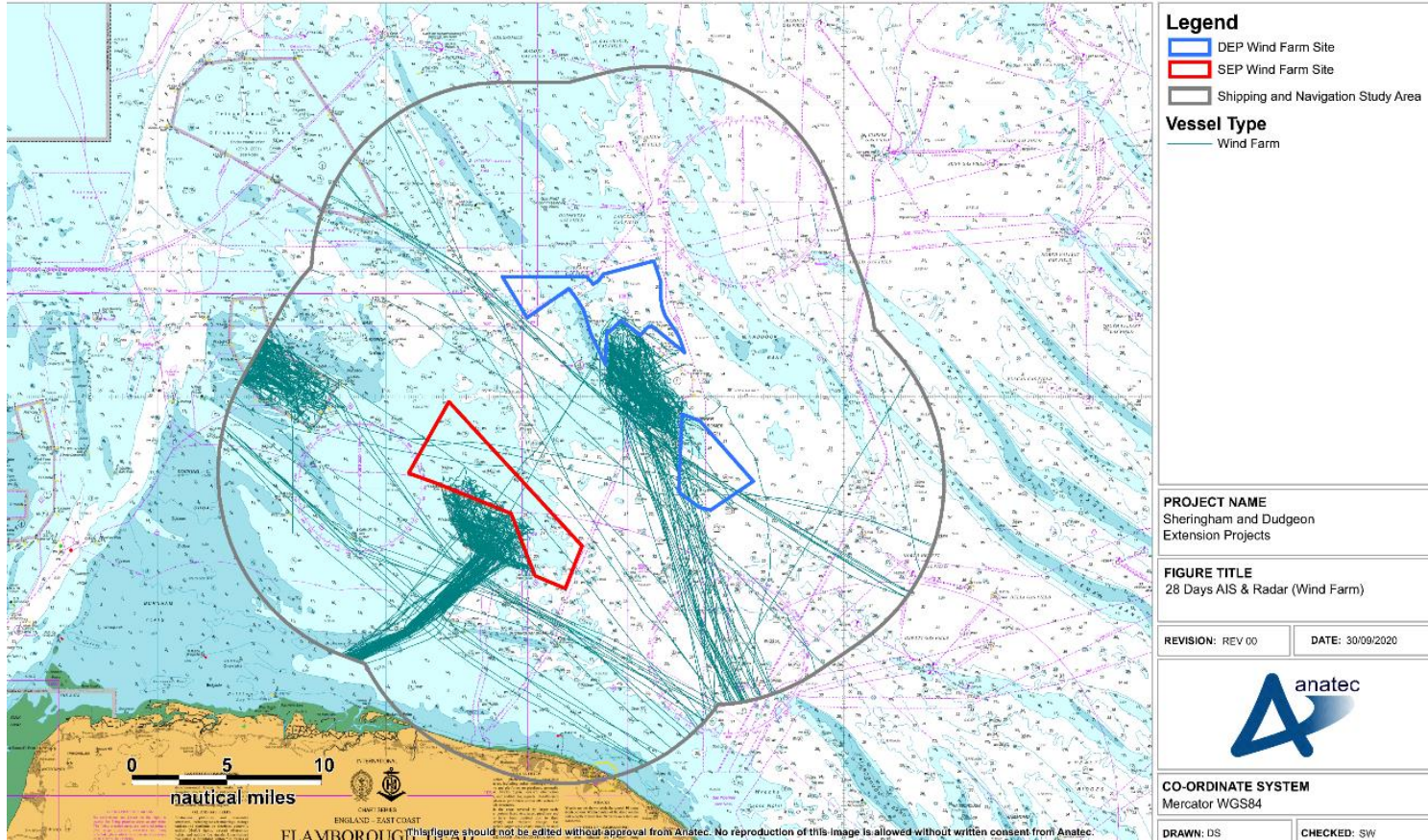
Average of 8 per day

Marine Aggregate Dredgers – 28 Days



Average of 1-2 per day

Wind Farm Vessels – 28 Days



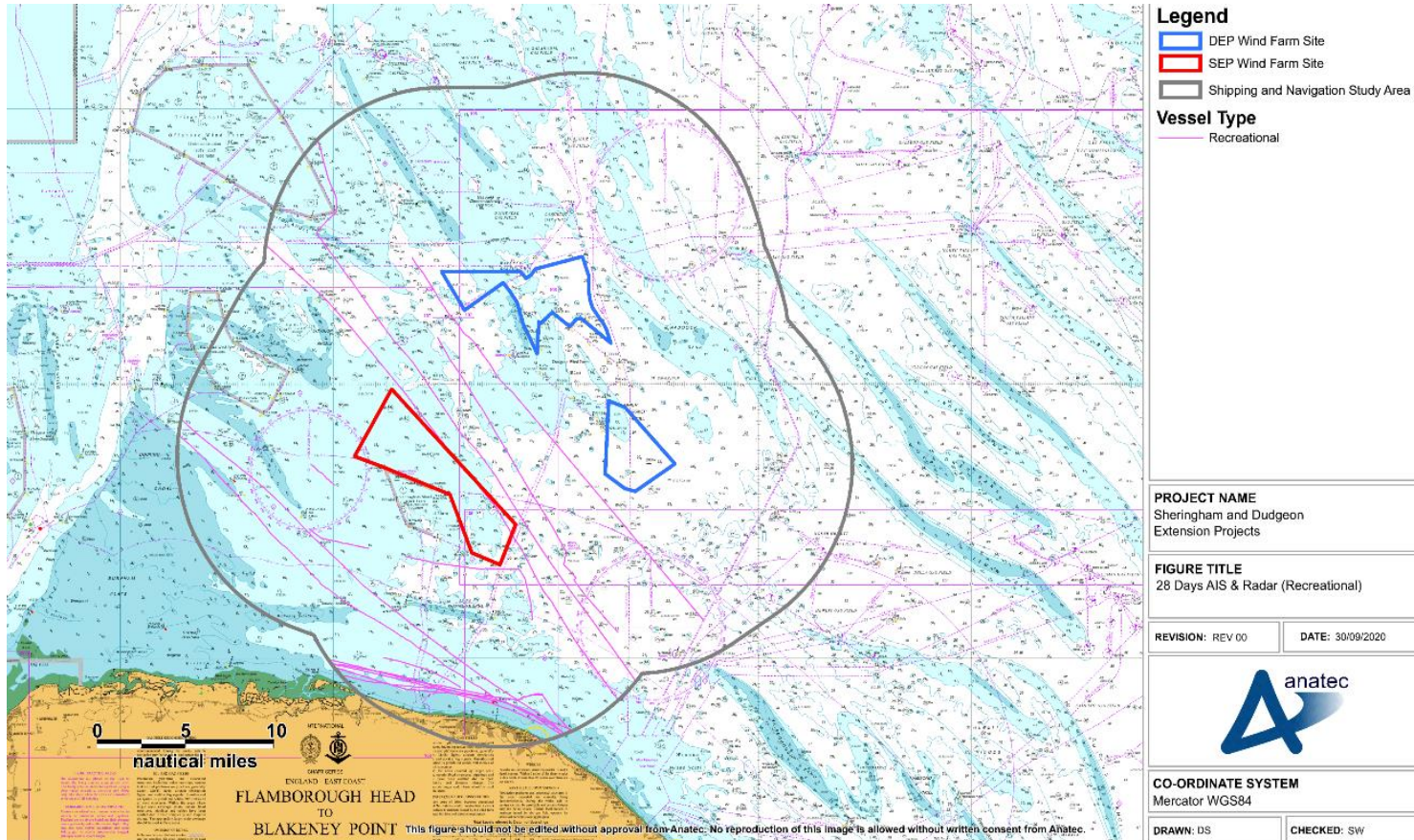
Average of 8 per day



Navigational hazards
associated with
Other Commercial Vessels –
Marine Aggregate Dredgers,
Oil & Gas, and Wind Farm

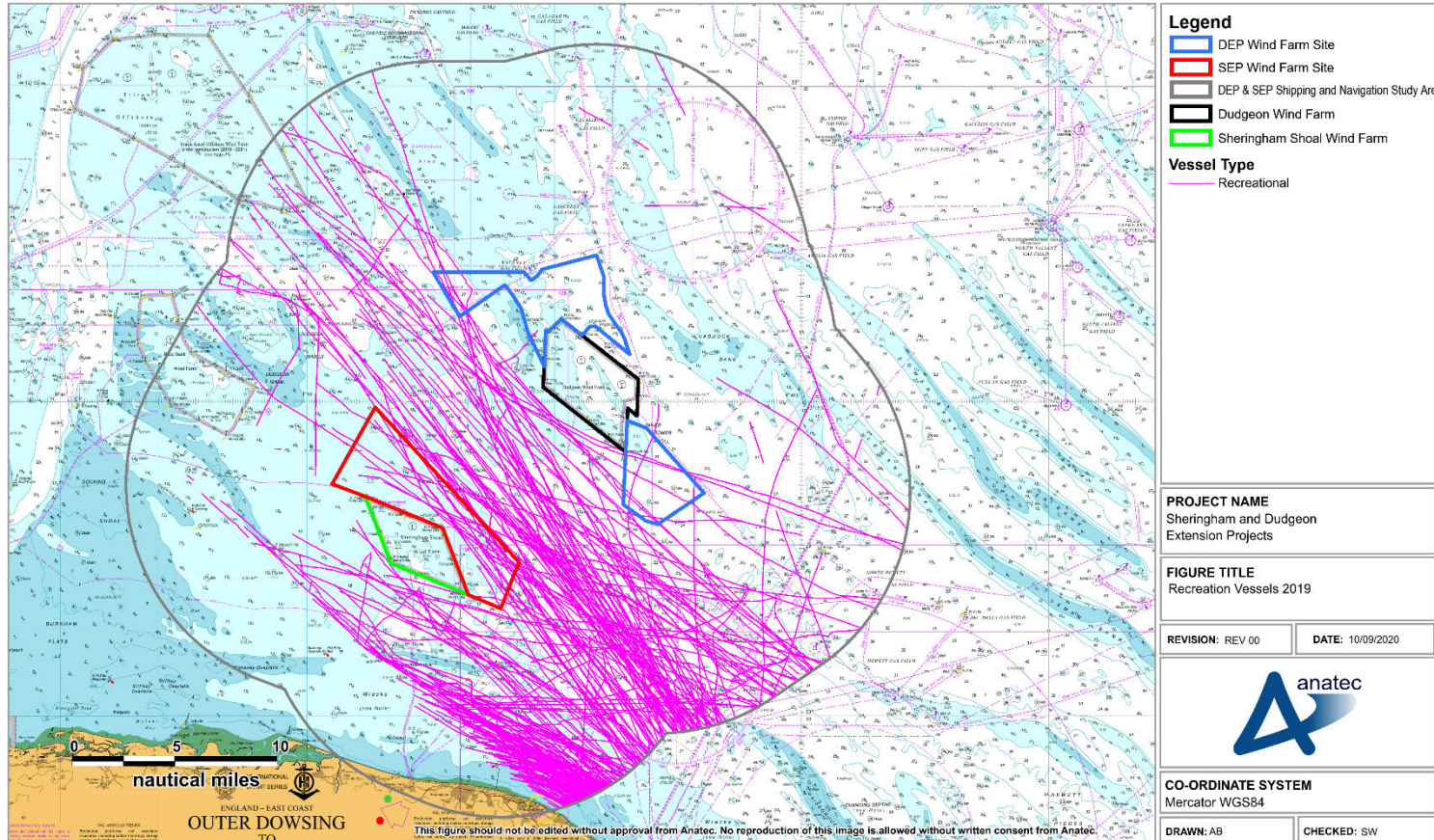
Recreational Vessels

Recreational Vessels – 28 Days



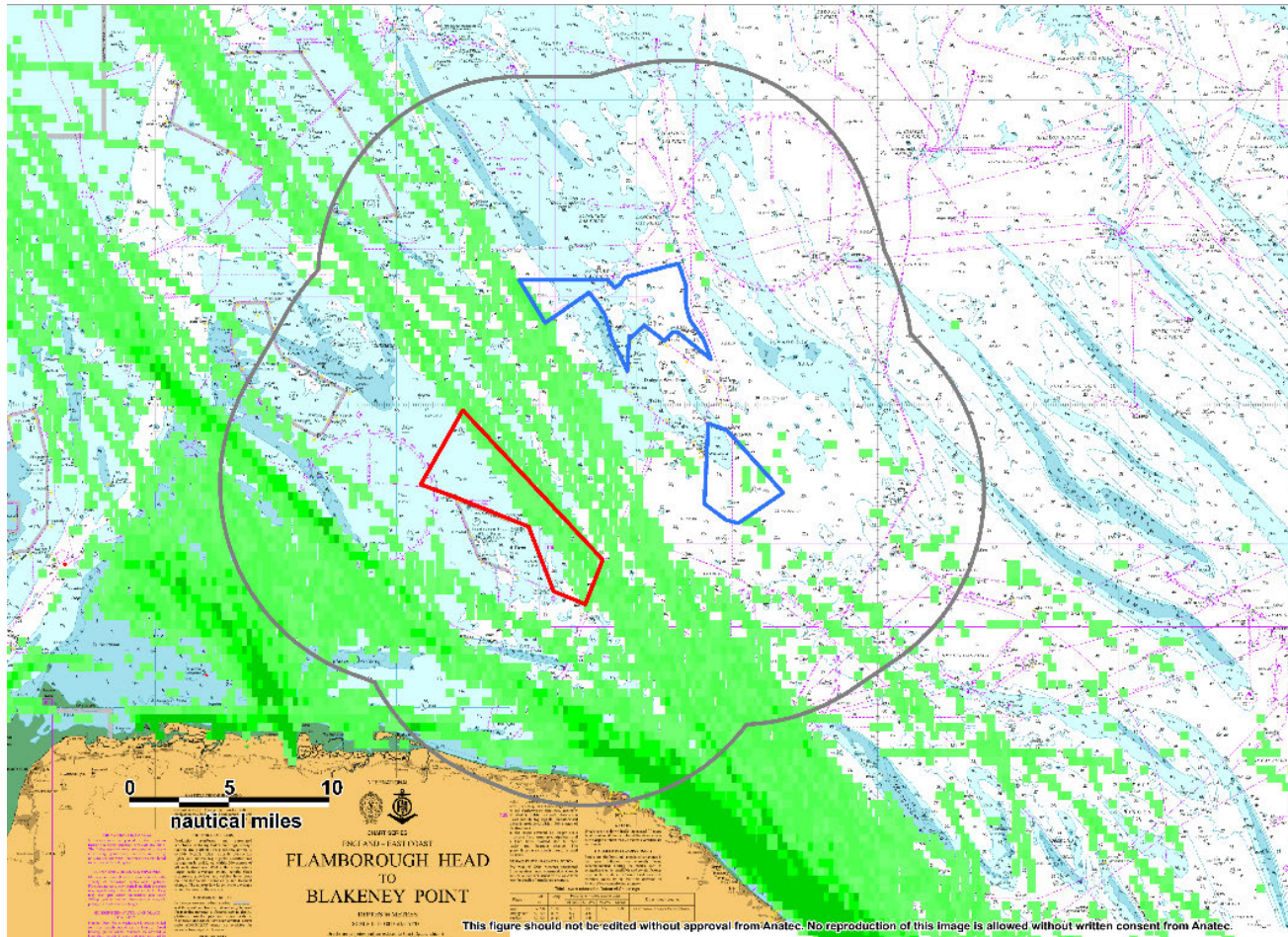
Average of <1 per day

Recreational Vessels – 12 Months (2019)



Average of 1 per day

RYA Coastal Atlas



Legend

- DEP Wind Farm Site
- SEP Wind Farm Site
- Shipping and Navigation Study Area

RYA Coastal Atlas Density

- Lowest
- Highest

PROJECT NAME

Sheringham and Dudgeon Extension Projects

FIGURE TITLE

RYA Coastal Atlas - Intensity

REVISION: REV 00

DATE: 30/09/2020



CO-ORDINATE SYSTEM

Mercator WGS84

DRAWN: DS

CHECKED: SW

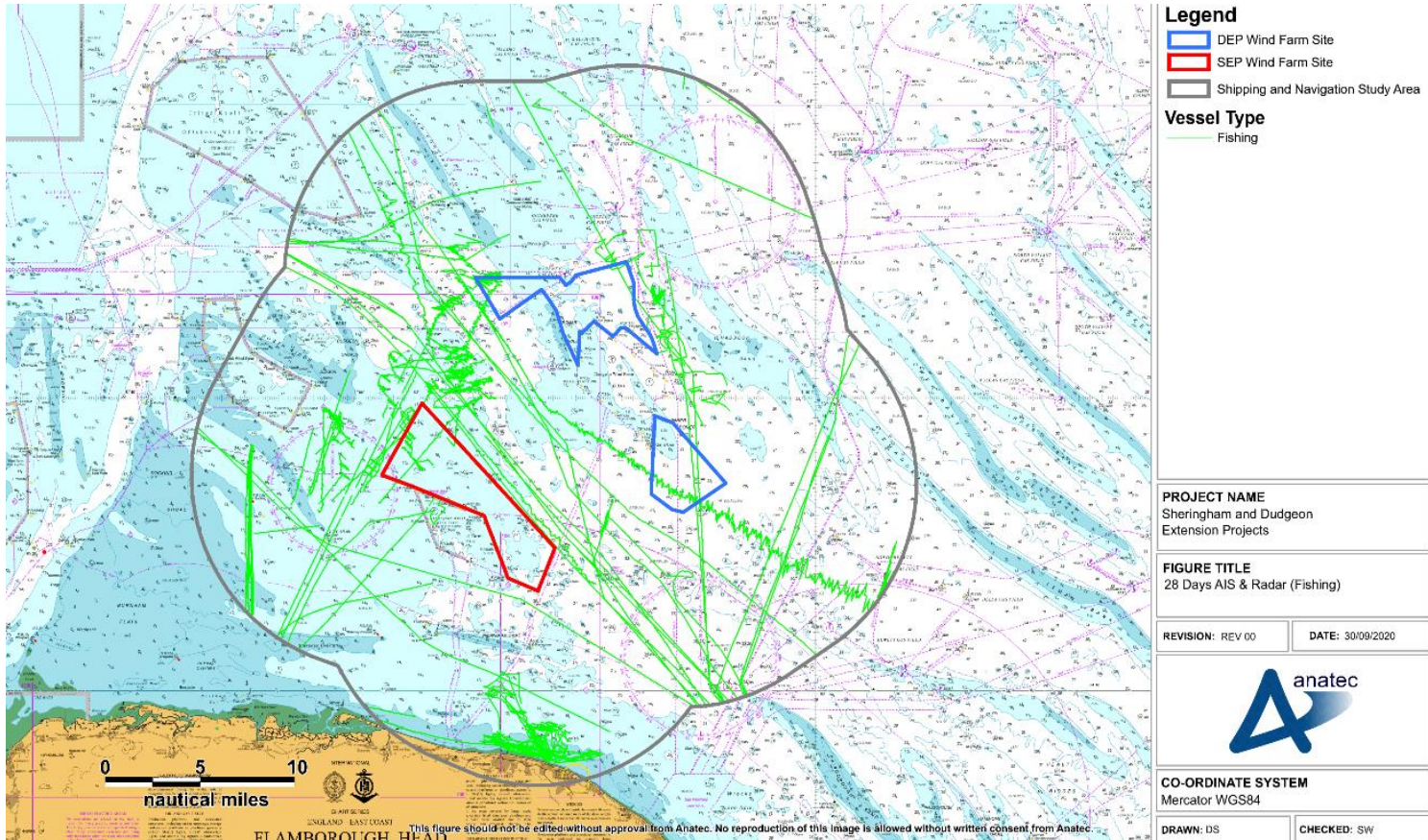
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Navigational hazards associated with Recreational Vessels

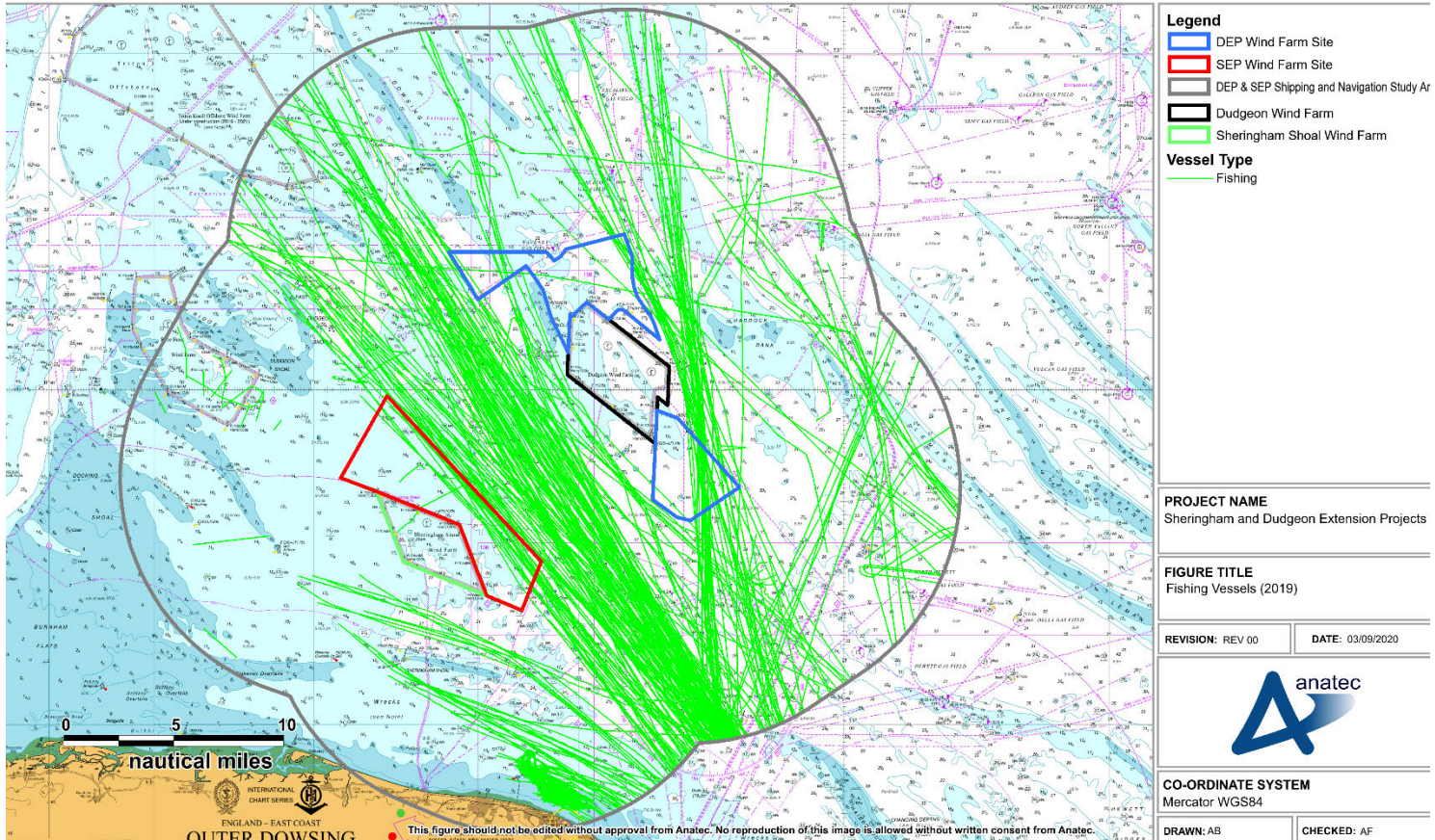
Fishing Vessels

Fishing Vessels – 28 Days



Average of 2-3 per day

Fishing Vessels – 12 Months (2019)



Average of 1 per day



Navigation hazards associated with Fishing Vessels in transit

Next Steps

- Information gathered today to be fed into completion of draft hazard log.
- Stakeholders to have opportunity to comment on hazards identified, rankings and control measures.
- Draft hazard log to be circulated to wider group (those who requested a review following the Hazard Workshop).
- Final agreed hazard log will be used to inform the NRA which will be included within the final application.

Thanks for attending!

DEP and SEP Hazard Workshop Minutes

10th August 2021



1 Overview

A virtual hazard workshop was held on the 10th of August 2021 to discuss the hazards that should be considered within the Navigational Risk Assessment (NRA) for the Dudgeon and Sheringham Shoal Extension projects (DEP & SEP). The participants are detailed in Table 1.

Table 1 Hazard Workshop Participants

Name	Initials	Organisation
Graham Cudbertson	GC	ABP Humber
Robert Merrylees	RM	Chamber of Shipping
Phil Pannett	PP	Cobelfret
Stephen Fairlie	SF	DFDS
Paul Scibilia	PS	IOG
Matthew Macintosh	MM	MCA
Nick Salter	NS	MCA
Dale Rodmell	DR	NFFO
Janet Ogilvie	JO	ODE/IOG
Philip van Wijnen	PvW	P&O
Carl Ashpole	CA	Perenco
Richard Hill	RH	RYA
Bert Broek	BB	Stena
Sarah Chandler	SC	Equinor
Erwin Oosterhoff	EO	Equinor
Julia Lewis	JL	Equinor
Sam Westwood	SW	Anatec
Adam Foster	AF	Anatec
Rebecca Worbey	RW	RHDHV

2 Key Notes / Actions

2.1 Welcome and Introductions

- SW led introductions, and stressed the importance of all parties reviewing and responding to the hazard log once issued as it helps support the assessment within the Navigation Risk Assessment (NRA).

- SC gave an overview of the extension sites and the planned development programme. Project is aiming for two years per project, with various options for the projects being staggered or constructed in tandem.

Action: Slides to be distributed post-workshop

- PEIR consultation was undertaken April to June 2021. The project is currently considering feedback and undertaking additional consultation as required. PEIR included a draft NRA, and the final application will include a full MGN 654-compliant NRA.

Action: Attendees can contact Anatec for copy of the NRA.

2.2 Project Parameters

- AF provided an overview of the layout process. The layout design process will be influenced by various constraints associated with the existing environment (e.g., ground conditions), noting the extent of some constraints will not be confirmed until pre-construction surveys have been undertaken.
- Stakeholder input (including shipping and navigation) will also be considered, with any conflicting preferences explored and discussed with stakeholders.
- The constraints mean a Rochdale Envelope approach will be taken in the consent application in terms of site boundary/parameters to ensure flexibility for a safe and viable layout. The NRA therefore considers a worst-case scenario (i.e., maximum number of structures and full site build out within the red line boundary).
- The final layout will be agreed post consent with the MMO (in consultation with the MCA and Trinity House) at which point acceptability to shipping, navigation, and SAR will be considered in line with MGN 654.
- RM asked if other layouts had been shown within the PEIR. SC confirmed that Chapter 5 includes all project envelope parameters and some indicative layouts are considered in other chapters to provide a worst case scenario (e.g. landscape and visual). It was noted that typically other receptors consider smallest number of largest WTGs to be worst-case.

Action: Attendees can contact Anatec for a copy of Chapter 5 if needed.

Action: Anatec to provide copy of PEIR NRA and Chapter 5 to the RYA.

- RH asked if the project was aware of the seaweed farming project which is due to be located nearby to the DEP and SEP sites. SC confirmed the project has been engaging with Sustainable Seaweed Limited and SW noted that the proposal was considered within the cumulative developments assessed.
- NS noted that the MCA consider the redline boundary (RLB) as an area requiring displacement regardless of the worst-case positions of structures.

- RM queried burial depths in marine conservation zones, noting that they seem shallow. SC confirmed that the Seabed Environmental Technical Group, including Natural England, were discussing such matters.
- PS queried if construction buoyage would be located within the site boundary. SW explained buoyage locations would be directed by Trinity House and as such positions could not be confirmed at this stage.

2.3 NRA and Hazard Workshop Methodology

- An overview of consultation to date was given, along with the proposed methodology for the hazard log. AF stressed that the key aim of the workshop was to understand the risks associated with the project from a local perspective.
- DR noted concerns about the methodology used for assessment of fishing gear snagging risk and that it should be considered within the NRA as a safety risk. DR noted that this was a wider regulatory issue, rather than specific to DEP and SEP. It was confirmed that impacts associated with commercial fishing would typically be covered in the commercial fisheries chapter.

Action: Equinor, Anatec, and Poseidon to discuss where impacts associated with fishing are covered and report to DR.

- Oil and gas assets in proximity to DEP and SEP were discussed, in addition to the consciousness of the project to aviation impacts – these, however, are being dealt with under separate workstreams with the relevant stakeholders.
- PS asked about impacts on communication equipment line of sight. EO confirmed that this would be investigated but that they were awaiting information from IOG.

Action: PS/JO to respond to EO email on communication equipment.

EO: Although not strictly part of the actual minutes, nevertheless noteworthy to mention this action is completed and Equinor has now a line-of-sight corridor into its design constraints register. Action closed.

2.4 Baseline Data

- AF provided a summary of the baseline features and incident data.
- CA stated the information provided on O&G assets will be reviewed and then Perenco will feedback any information.

Action: CA to forward any additional thoughts/information on O&G assets.

- RM queried the way in which the Marine Accident Investigation Branch (MAIB) incident data was displayed, as incidents typically happen over a wider area as opposed to a defined point (e.g., drifting). AF confirmed this positional data comes directly from the MAIB data. SW confirmed that drifting scenarios (i.e., how vessels

drift with weather and tidal influences) are considered as part of the modelling element of the NRA.

2.5 Feedback per Vessel Type

- AF gave an overview of traffic data, and then asked for feedback by receptor on mitigations/impacts as follows:

2.5.1 Commercial Vessels

- PvW (P&O) noted that as per the individual consultation meeting the reduction in sea room does not present any increased navigational safety concerns. However, project vessels crossing between the sites did cause deviation issues in terms of collision avoidance action.
- SW noted Equinor are considering appropriate means and procedures to manage project vessels to ensure that they do not impact on third party movements. SW queried if this was the kind of mitigation P&O would be looking for and PvW confirmed it was.
- PP (Cobelfret) gave details of an ongoing incident near Zeebrugge whereby subsea cables had caused issues for a vessel anchoring when a black out occurred. PP noted that looking at a future-case environment (ongoing development) the impact on vessels was going to increase (i.e., less safe sea-room to anchor in an emergency which means increased towage / salvage costs for an operator). SW queried if this was related to the industry as a whole rather than DEP and SEP specifically. PP stated it was and would like the UK regulators to consider.
- Commercial operators in the workshop did not consider it likely that they would navigate through the arrays. CA noted that Boston Putford have been known to route through, but that he would need to raise the question with them. He didn't see that it was likely in the case of DEP and SEP.
- RM noted the Chamber's ongoing concern associated with navigation squeeze and loss of sea room and was hoping that this would be considered further in the proposed OWEC¹ scope of works.
- RM noted that although loss of sea room was a wider cumulative issue they do have concerns over the western and eastern extents of the extensions either side of the 'corridor' between the sites.
- SF (DFDS) noted that their interest in the area was related to adverse weather routes inshore of the extension, but agreed with the other operators.
- GC confirmed there was nothing additional to be added from Humber ports (and did not foresee any direct impacts to ports or port operations) but was keen to continue to be involved.

¹ <https://www.thecrownestate.co.uk/en-gb/what-we-do/on-the-seabed/offshore-wind-evidence-and-change-programme/>

2.5.2 Oil and Gas Vessels

- CA queried whether pipeline access would be maintained. EO confirmed that a minimum of 500 metres around existing pipelines will be maintained, but assessment is ongoing.
- SW asked oil and gas operators to consider vessel access noting again this will be covered by a separate workstream. CA noted potential for impacts on Walk to Work vessels, but that he would like to take the information away and consider before reverting with feedback.
- It was agreed that a separate oil and gas workshop may be helpful to discuss any specific issues.

2.5.3 Recreational Vessels

- AF noted that consultation has been undertaken with the RYA and CA, and local clubs recommended by the CA. No direct feedback was raised.
- RH noted that any feedback provided at today's workshop was purely advisory at this point and an official statement on the project would not be made until it was submitted to PINS.
- RH requested that routeing was considered port to port, including impacts related to the export cable corridor. AF confirmed routing in the NRA is assessed on a port to port basis.
- RH asked that the Coastal Atlas is only presented with the colour provided by the RYA in the dataset and with their specific legend. AF confirmed this would be updated.
- RH noted that AIS use on recreational vessels is more likely offshore but of course is not a mandatory requirement. RH expressed concern that vessels may not be visible on Radar surveys if a Radar reflector was not carried. SW noted that as Radar reflectors were a carriage requirement² and the surveys included visual observations, Anatec are confident that all recreational vessels within the study area have been recorded. SW confirmed the visual logs from the surveys would be included in the NRA. Relevant consultation input will also be considered.
- AF noted that the full Coastal Atlas including the General Boating Area aspect would be considered. RH noted the General Boating Areas would provide indication of non AIS traffic and was glad they were being considered.
- RH requested that target burial depths be considered within the intersection between general boating areas of the Coastal Atlas and the cable corridor, and noted that vessels in such areas may not carry AIS. SW noted that MGN 654 and the projects consent conditions set out requirements in terms of managing navigational safety risk associated with cable burial and protection.
- RH noted that their concerns were typically in areas less than 5km from the shore and related to construction and maintenance vessel movements, and cable burial and reinforcement. SW noted that this would be considered in the NRA and asked if any additional mitigations were needed.

² SOLAS V 19.2.1.7

- RH noted that maintaining navigation aids was important³ as well as ensuring effective promulgation of information to local clubs. RH stated he didn't have any specific recommendations at this point, but noted that the Coastal Atlas included marina/club information.

Action: Equinor/Anatec to consider how to secure additional promulgation of information outside Notification to Mariners.

2.5.4 Commercial Fishing

- DR noted that his primary concern was the worst-case scenarios being assessed particularly regarding surface laying cables and habitat protection, and reiterated concern over gear snagging.
- SW noted that consent conditions including the provision of a Cable Burial Risk Assessment will be in place to manage the safety impacts associated with cable protection, as well as post installation monitoring.
- DR also stressed the importance of effective promulgation of information (including in relation to cable exposures) and that commercial fishing vessels would be expected to navigate through and fish within the array.
- DR noted fishing does occur in the existing Sheringham site, and he would expect similar to occur in the extension.

Action: Equinor to arrange follow up with NFFO to discuss relevant matters including s42 response.

2.5.5 Search and Rescue

- SW noted impacts associated with Search and Rescue (SAR) will also be considered, and that the project will be compliant with all SAR requirements under MGN 654.
- RM queried how the extensions would align in terms of lines of orientation with the existing sites. SW stated no firm decisions on layout have been made at this stage, however the final layout would consider the relevant aspects of MGN 654 (alignment with and / or suitable spacing from the existing structures).

2.6 Next Steps

SC thanked attendees and AF highlighted next steps:

- Information gathered will feed into completion of a draft hazard log;
- This will be circulated to attendees for opportunity to comment on hazards identified, rankings and control measures; and
- Final agreed hazard log will be used to inform the NRA which will be included within the final application.

³ Noting requirements for Aid to Navigation Management Plan as a consent requirement

Appendix A.11

*This appendix has been produced to support the Applicant's response to the Examining Authority's Fourth Written Questions – Q4.21. This document should be read alongside **The Applicant's Responses to the Examining Authority's Fourth Written Questions** [document reference 21.5]*

Version 3.0

HO-FPM-RP-v3.0

Flightpath Management (FPM)

Recommended Practice for Offshore Helicopter Operations

Enter >



HeliOffshore
Safety Through Collaboration

Safety Through Collaboration

Collaboration empowers safety and is at the very heart of HeliOffshore. This Flightpath Management (FPM) Recommended Practice is a great example of how our industry – from designers and maintainers, to pilots and passengers – works together and learns from each other to ensure no lives are lost in offshore flight.

I would like to thank the HeliOffshore FPM Working Group, previous members of the Working Group, industry stakeholders and every HeliOffshore member who came together to deliver this guidance. Thank you for your commitment and contribution. Together, we will implement and sustain ever-higher levels of performance so those we are responsible for travel home safely every day.

Tim Rolfe
CEO, HeliOffshore

Publishing Details

Version: 3.0

Publication date: February 2023

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The guidance given in this recommended practice document represents a collective position adopted by the FPM Working Group. Participation in the group or being named as an author does not imply that an individual or their organization support any particular point.

This document is not intended to replace any contractual negotiations, agreements or requirements between helicopter operators and their customers.

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Section 1 Introduction



Section 1

Introduction

1.1 Introduction and background

Flight Path Management (FPM) is the planning, execution, and assurance of the guidance and control of aircraft trajectory and energy, in flight or on the ground¹. Key elements of FPM are stabilised departures and approaches.

The Flight Safety Foundation (FSF) Approach and Landing Accident Reduction Task Force (ALAR) determined that non-stabilised approaches for fixed-wing aircraft were causal factors in 66 percent of 76 approach-related accidents that occurred between 1984 and 1997². These accidents could be represented by two groups: the low and slow approach that resulted in a reduced ground clearance CFIT event and the fast and high approach that concluded with loss of control or runway excursions.

In a similar context, the 2022 HeliOffshore Safety Performance Report determined that offshore helicopter accidents involving controlled flight into terrain or surface (CFIT) and loss of control inflight (LOC-I) events resulted in 49 percent of all industry fatal accidents between 2013 and 2021. While flight path management encompasses all aspects of aircraft movement, approach path mismanagement issues have shown to be a significant contributor to CFIT and LOC-I. As such the trend has been to adopt stabilised approach principles in an attempt to eliminate offshore approach incidents.

The adoption and adaptation of fixed-wing principles has contributed to a safety enhancement of offshore helicopter approaches. However, in implementing approach criteria based simply upon airspeed (IAS), rate of descent (ROD) and angle of bank, the opportunity to directly consider the energy state of the aircraft on approach to a landing site has not been addressed.

The recommended practices in this document seek to expand the considerations appropriate to offshore helicopter operations by reviewing seven key elements fundamental to the conduct of a safe departure, stabilised approach, and go-around in the offshore environment.

These seven key elements are:

- Monitoring procedures
- Briefings
- Energy state management
- Use of automation
- Departure procedures
- Stabilised approaches
- Go-around management

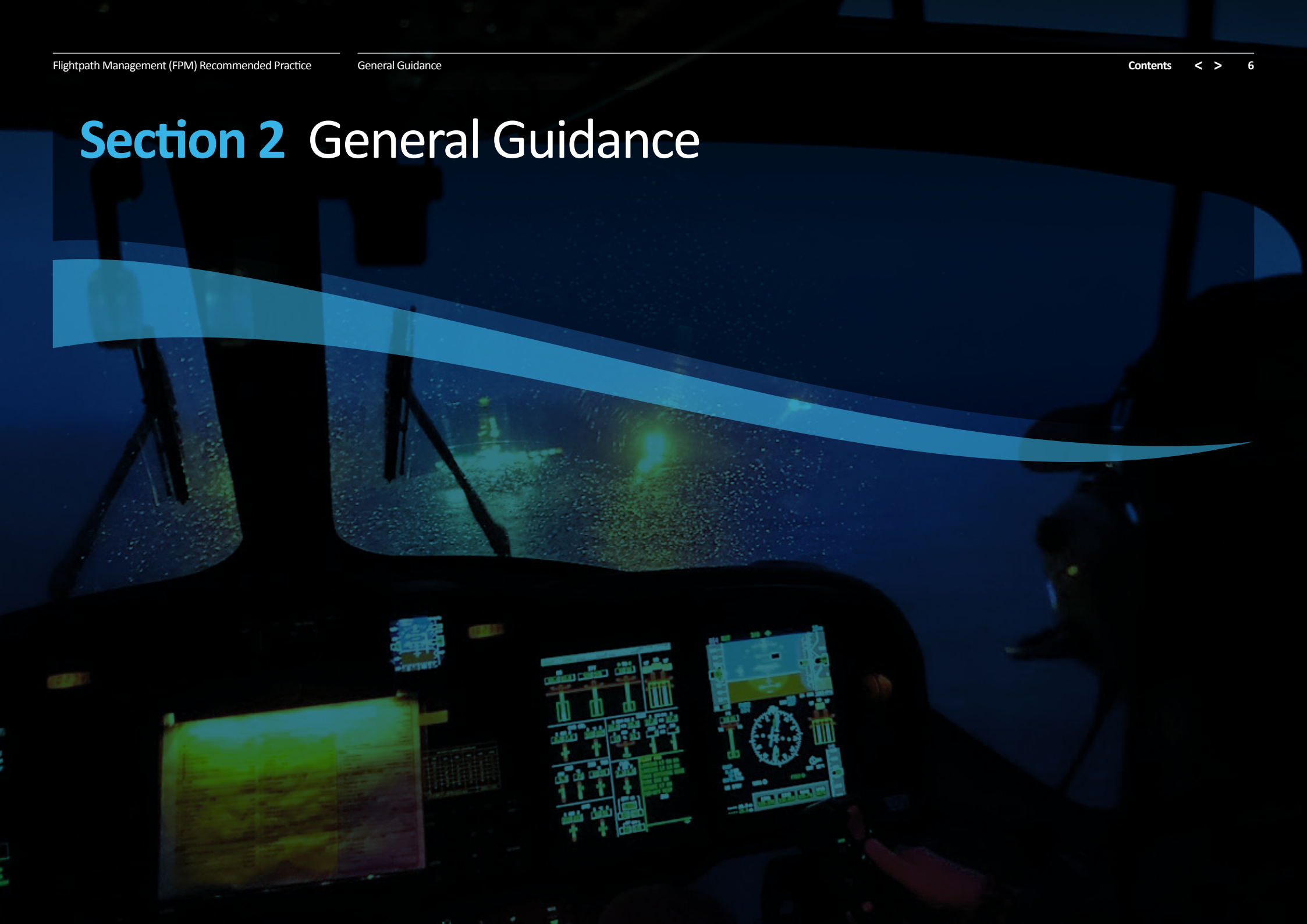
Included in this guidance are references to [IOGP Report 690](#) Offshore Helicopter Recommended Practices. Some extracts from that report are reproduced for ease of reference, but readers are advised to consult the IOGP Report 690 series which is closely related to the HeliOffshore Recommended Practices. Please note that references to IOGP Report 690 in this document are accurate as of October 2022.

Revision 3 of Flightpath Management Recommended Practice builds upon the previous edition and now includes guidance for departures. The other technical aspects, which are applicable for all phases of flight, are consolidated under 'General Guidance'.

1 FAA ACT ART Recommendation 20-1

2 Flight Safety Digest November 1998-February 1999

Section 2 General Guidance



Section 2

General Guidance

2.1 General guidance introduction

This section aims to provide the necessary background to the main FPM concepts as well as outlining the key technical skills and knowledge that are required during all phases of flight and are important in achieving consistently safe outcomes.

2.1.1 Fixed-wing approach criteria

It is helpful to highlight the basic principles of the stabilised approach concept, first developed in the fixed-wing community. It serves to provide context and background to the helicopter-specific guidance discussed later in this document.

Although some variation exists among commercial fixed-wing operators, the fundamental principle of a stabilised approach focuses on 'approach gates' or a point in the approach by which certain criteria should be achieved. There are many similarities when comparing stabilised criteria between fixed-wing aircraft and helicopters. The purpose of the criteria is similar regardless of aircraft type, but to further illustrate the fixed-wing background, examples are listed below:

The principles stipulated by Airbus in their FOBN are indicative of widely accepted criteria to be achieved by certain heights on approach.

1. Aircraft on the correct lateral and vertical flight path
2. Small changes in heading and pitch to maintain flight path
3. Landing configuration
4. Thrust above idle and stable to maintain required speeds
5. Landing checklist complete
6. Flight parameters within limits

The flight parameter limitations are further expanded as follows:

1. Airspeed V_{app} +10/-5 kt
2. Vertical speed less than 1000 fpm, unless briefed
3. Pitch attitude +/- specified degrees (aircraft-dependent)
4. Approach aid deviation (G/S, LOC) within specified limits
5. Deviations from approach track (PBN limitations)
6. Unique procedures or abnormal conditions require specific briefings.

Deviation from these parameters outside of the specified gates requires an immediate go-around.

For instrument procedures the basic parameters for stabilisation remain the same, but specific boundaries for instrument approach navigation are encouraged for each instrument approach type:

- a. CAT I ILS: within 1-dot deviation of glide path and localiser
- b. RNAV: within ½-scale deflection of vertical and lateral scales and within RNP requirements
- c. LOC/VOR: within 1-dot lateral deviation; and
- d. Visual (to a runway): lined up with the runway centreline no later than 300 ft.

The fixed-wing principles further recommend that stabilised approach gates should be observed, and active communication calls made during approach in multi-pilot operations. The normal bracketing corrections used to maintain stabilised conditions may occasionally involve momentary overshoots due to atmospheric conditions; such overshoots are acceptable. Frequent or sustained overshoots are not.

Legacy guidance for the 1,000 ft gate required that a go-around be conducted if the flight was not fully stable in IMC. The new functional significance of the 1,000 ft mark is that it is the last suitable point along the approach to ensure that final landing

configuration is selected and verified by the flight crew. The gear transition, deceleration to final approach speed, and power stabilisation should occur before the aircraft reaches the next gate at 500 ft AGL. It should be emphasised that initial configuration should occur before reaching the 1,000 ft gate; this gate is the last point at which final landing configuration should be selected and confirmed.

Previous guidance for the 500 ft gate required a go-around if the flight was not fully stable in VMC. The revised guidance retains the recommendation that the approach should be fully stable at this gate; however, the mandate to go-around has been removed. Although a go-around may be considered, not mandating this action reduces the overall number of potential go-arounds by allowing low-risk unstable approaches to continue while at a safe altitude. The 500 ft gate is a familiar demarcation for flight crew and is a suitable point in the approach to verify that all stable approach criteria have been met. Being stable at this point allows for subsequent developing instabilities to be compared against a state of constant energy reduction. Improved situational awareness at this gate is also achieved through procedural, active communication between flight crew.

The 300 ft gate establishes the boundary between higher altitudes where a stable approach is strongly recommended and the point where continuing an unstable descent erodes the margin of safety. It differentiates between approach stability and a go-around decision. The 300 ft AGL value is not intended to be absolute; it can be approximated to take advantage of aircraft generated callout systems. For example, it could be synchronised with the 100 ft to go call many operators use when approaching DA/MDA. Descending in an unstable state below the 300 ft gate should be a warning to flight crew that the level of risk is increasing, and action is required, whether the aircraft is unstable at this gate or becomes unstable below 300 ft.

Awareness of the increased need for action can be improved by reconsidering the definition of the aircraft's condition, from being in an unstable condition to being in a condition to go-around. This can prompt the flight crew to make the correct decision – to go-around. To further emphasise the point, the 1,000 ft to 300 ft window can be viewed as the stable approach zone, with the focus on ensuring the aircraft is fully stabilised. A gate of 300 ft AGL to execute a go-around provides adequate altitude margin for even the most extreme low-energy unstable approach.

2.1.1.1 Example of fixed-wing approach gates and calls

Gate	PM call	PF response
1,000 ft AGL	“1,000, configured/ not configured” or “Gear”	“Roger”
500 ft AGL	“500 stabilised/ not stabilised” or “Speed [parameter]”	“Roger” or “Correcting”
300 ft AGL	“300 stabilised or go-around”	“Roger” or “Going around”
100 ft to DA/MDA	“100 to go stabilised” or “100 go-around”	“Roger” or “Going around”

2.2 Operator monitoring policy

The operator monitoring policy should include monitoring duties and responsibilities of all flight crew members. It should specify the following:

- The pilot monitoring plays an essential role in operational safety and, as such, these stand-alone skillsets must be recognised and continuously developed.
- The primary duty of the PM during the take-off is to monitor the flight profile, provide standard callouts to support the PF and select the aircraft systems as requested. The PM confirms the appropriate operation of aircraft systems and advises the PF of any abnormal conditions or deviations observed.
- Standardised flight profiles and standardised calls, which provide the framework for the PM duties and allow early detection of profile deviations.
- In the event a crew is unable to maintain a published profile for any reason, the PM must receive a thorough briefing of the PF's intentions to enable proper monitoring of agreed parameters.

The ability to follow stabilised criteria and procedures requires both pilots to work in unison and share the same situational awareness. This requires the use of detailed briefings, which include the go-around technique to be used, and a prescribed set of standard callouts that ensure both pilots are sharing the same mental picture at all times during the approach and the go-around.

Given that considerable variation exists between aircraft types operated offshore and between operator philosophies, it is not possible to detail every specific call, although a large number are generic and could be applied. This guidance therefore provides the basic principles that should be applied to Operations Manual procedures and examples of some current practices. Examples are provided in the annexes at the end of this document.

IOGP Report 690-2, Flight Procedures Section 30, specifies that:

“The Aircraft Operator has developed appropriate flight procedures.

Flight procedures (SOP or Operations Manual) are used by the flight crew in the performance of their duties, referencing the FCOM if available. SOPs include designated crew roles and responsibilities, use of checklists, automation policy, and crew monitoring procedures, including cross check of critical actions, mode settings, aircraft responses and deviation calls. The procedures are described concisely, with clear and detailed PF/PM task assignments, so that flight crew will recognize and act on deviations from standards in a timely manner.

HFDM and/ or FOQA programs are used to monitor trends regarding these procedures. Flight crew make active use of CRM/TEM/ADM techniques to identify and manage flight risk.”

2.2.1 Standard calls

Standard calls fall under the criteria of calls required throughout the normal flight regime to ensure an equivalent situational understanding between the two pilots. These calls do not fall under deviation calls addressed in Section 2.2.2. Standard calls should be embedded throughout an operator's Standard Operating Procedures and serve to ensure the flight crews are speaking a common language with anticipated callouts during various phases of flight. Non-standard callouts can lead to confusion resulting in delayed or incorrect actions.

All operators are encouraged to include standard calls as part of a continuous improvement process, using tools such as LOSA to ensure the continued validity of all cockpit procedures. Historically, cockpit callouts have increased as the result of events and reports but are rarely reduced as a result of automation usage. To maintain the credibility of such calls and in turn ensure their correct and continued usage, it is considered essential to keep calls to a minimum and only use them when a missed call or event would have a negative safety consequence.

IOGP Report 690-2, Flight Procedures, Section 31 specifies:

"Ensuring a safe flightpath with early identification of deviations and timely corrective action."

"There is a sterile cockpit policy covering, as a minimum, restrictions on unnecessary conversation, restricting activities to essential operational matters during critical phases of flight, use of EFBs or PEDs, and paperwork, during flight below key altitudes, and during certain phases of flight or ground operations."

2.2.2 Deviation calls

It should be noted that the example deviation calls provided in the annexes are not exhaustive and refer predominantly to the approach phase. It is essential to ensure brevity where aircrew can concentrate on the task in hand and not focus on the calls as a script to be followed. Deviation calls should serve a safety purpose at all times and are most effective when a common understanding of the plan exists. This can only be facilitated by a suitable briefing. A deviation call requires active aircraft monitoring skills as well as intervention skills.

Deviation calls should therefore be based upon the following policy criteria:

- Standard Phraseology
- Actions on missed or omitted callouts
- Use of aircraft-generated callouts
- Consideration for common calls across aircraft types
- Recognising and responding to any

deviations in a timely, appropriate, and effective manner

Note: HeliOffshore Pilot Monitoring Research

Extensive research has been recently carried out by Dr Steve Jarvis on behalf of HeliOffshore to analyse exactly how pilots monitor the flight instruments and particularly how this essential process is affected by an unexpected in-flight event. Furthermore, an easily trainable mitigation can be used to ensure the pilot flying maintains focus on the flight instruments and maintains good situational awareness. The Pilot Monitoring research paper and accompanying video were published in September 2022 and can be found on the [HeliOffshore website](#).

2.3 Briefings

Effective briefings are essential. An operator's briefing policy should ensure briefings contain sufficient detail to ensure mutual understanding and agreement with the planned procedure and confirmation that each pilot understands their duties throughout.

2.3.1 Briefing scale

The standard briefing alleviates the requirement to recite the known or standardised elements of the profile. Operators should stipulate that it is imperative that any procedural element falling outside of the standard procedure is specifically briefed and acknowledged, such as adjustments to ATC clearances. Crews should also have the option of completing a full briefing at their discretion, comprising

a recitation of the profile in addition to any non-standard elements.

2.3.2 Briefing scope

Briefings should be carried out prior to all departures and approaches. The depth of the briefing should account for recency of task and familiarity with the local environment. Operators should establish a policy in which briefings account for aircraft performance, monitoring obstacle clearance, environmental conditions, automation and any pertinent threats that may be present, particularly in a Degraded Visual Environment (DVE). When departing from offshore installations briefings should also account for any challenges presented by the Limited Obstacle Sector and other pertinent helideck limitations or conditions.

2.3.3 Interactive briefings

Briefing design should encourage interaction between the PM and PF, through effective listening and open communication. The goal is to create synergy between the crew, so an uninterrupted lecture style should be avoided. Briefs should be conducted during periods of low workload to maximize effective communication, while allowing the PF and PM to validate the contents of the brief through crosschecks and confirmations while in progress.

Interactive briefings (confirming agreement and understanding after each phase of the briefing) are more effective and productive than an uninterrupted lecture followed by: "Any questions?". Interactive briefings provide the crew the opportunity to communicate and to check and correct each

other as necessary e.g., confirming the use of the correct departure and approach charts, confirming the correct setup of nav aids for the assigned take-off and landing.

2.3.4 Summary points for briefings:

- Briefings should be adapted to the specific conditions of the flight, focusing on the elements that are relevant for the particular take-off, departure, cruise or approach and landing.
- Briefings should be interactive and allow for dialogue between the PF, PM and other crewmembers.
- Briefings should be conducted during low-workload periods.
- Briefings should be conducted even if the crew has completed the same flight many times in the past. Vary the briefing technique or emphasis when on familiar routes to promote thinking and to avoid doing things by habit.
- Briefings should cover procedures for unexpected events.
- Pilots should not fixate on one particular aspect of information in a briefing, as other important information may be missed.

2.4 Helicopter energy state

Energy state is the combination and availability of airspeed, altitude, thrust, and aerodynamic drag at any given time. Trajectory is the lateral and vertical flight path of an aircraft as it travels through a defined airspace³. A well-managed helicopter energy state is essential to ensure a safely flown departure or approach.

2.4.1 Energy state management

Helicopter Energy Management is the planning and control of airspeed or groundspeed (kinetic energy), altitude (potential energy), power (chemical energy), aerodynamic drag (landing gear and fuselage), and trajectory to achieve desired targets appropriate for the operational objectives.

Operators should establish procedures for efficient planning and execution of take-off and departure including monitoring and deviation actions to protect the flight from reaching an uncontrollable energy state.

Establishment of energy state criteria as part of an Approach Management policy, is considered an essential element and should be incorporated in Operations Manual guidance.

It should be noted that direction provided to aircrew in terms of energy state management will vary according to type, making it essential to develop procedures applicable to each aircraft model. The energy state boundary referred to above is a 'hard' warning envelope; specific criteria in terms of airspeed and rate of descent should be defined for each type to provide 'soft' boundaries within which the aircraft is considered to be on an acceptable flight path. Whilst power settings will vary according to aircraft type, operational circumstances and environmental conditions, operators should consider defining a minimum sustained power setting below which a stabilised approach is unlikely to be maintained in most circumstances and define the intervention that is required.

Significant focus has been placed on energy state management on approach, however, energy state management on departure presents a unique challenge as the departure is characterised by a low energy state environment. While on approach, the option to execute a go-around is available should an unsafe flight regime be suddenly encountered, there are few options available on departure should such a situation occur.

2.5 Automation

Automation and its safe usage have been the subject of much debate, with focus areas of mode confusion, training and the development of standard operating procedures to ensure equivalent situational awareness between pilots.

HeliOffshore has dedicated significant resources to both research and training videos to ensure the necessary understanding of both concept and operation of automation systems.

IOPG Report 690-2, Flight Operations Section 5 specifies:

"The Aircraft Operator has defined automation procedures. The automation procedures contain requirements for the appropriate use of automation to reduce cockpit workload and increase standardisation.

The automation procedures are defined for all phases of flight. Type-specific procedures for the use of automation are based on those published in the Flight Crew Operating Manual (FCOM).

The automation procedures detail methods to maintain flight proficiency in manual control, including those conditions under which automation systems are deselected and manual flight undertaken.

The Minimum Equipment List (MEL) or Minimum Departure Standard (MDS) has clear requirements for the AFCS to be serviceable for night or IFR flights."

³ FAA ATC ARC Recommendation 19-4

2.5.1 Automation principles

HeliOffshore's Automation Guidance to support this information can be found in *Annex C – Automation Guiding Principles*. These guiding principles are offered to ensure effective use of automation. Standard Operating Procedures based on these principles should help to mitigate the risks of interacting with cockpit automation and improve safety performance in usage and monitoring.

1. The coupled/upper modes should only be selected once the aircraft is in a trimmed stable configuration after take-off, possibly defined by a minimum speed (for example, V_{min} , V_{toss} or V_y) and a minimum height. Similarly, guidance should describe when the coupled/upper modes should be decoupled during an approach. During DVE that may be as late as possible in the approach. Transition procedures should be clearly detailed in the Operations Manual.
2. All climbs should be performed in 4-axes, where possible according to helicopter type.
3. All descents should be performed in 4-axes.
4. Cruise should be flown in 3-axes as a minimum standard, utilising lateral modes for navigation and an altitude hold function. Operational guidance should describe the varying situations that support 3-axes versus 4-axes cruise coupling and any associated risks.

Note: Specific consideration should be given to automation training requirements to ensure comprehensive understanding of all protection modes and the consequences an OEI condition may have on degraded coupled modes.

2.5.2 Manual flight

The transition from coupled to manual flight, a daily and normal occurrence for helicopter operations, requires defined criteria to ensure a safe and standardised procedure.

The ability for pilots of modern aircraft to maintain manual flying currency has also been a recent topic of debate and warrants inclusion in this guidance material. The criteria under which manual currency practice can take place should be clearly defined in the appropriate section of each company's operations manuals. Example guidance is given below.

Criteria for manual flight

To address the potential degradation of manual flying skills due to use of automation, crews are encouraged to fly manually in VMC and IMC. No limits are placed on the frequency of manual flying, but it should only be conducted in the following circumstances:

- a. In VMC:
 - i. By day onshore and offshore at any time, including take-off, enroute, approach and landing.
 - ii. By night onshore at any time, including take-off, enroute, approach and landing.
- b. In IMC:
 - i. By day or night while enroute at any time above MSA.
 - ii. By day for onshore and offshore departures, and for onshore instrument approaches, provided conditions are at or better than 4,000 m visibility and cloud base not below 600 ft or not below 200 ft above DH/MDH, whichever is the higher.
 - iii. By night for onshore departures, and for onshore instrument approaches, provided conditions are at or better than 5,000m visibility and cloud base not below 1,000 ft or not below 200 ft above DH/MDH, whichever is the higher.
- c. Night offshore departures shall not be flown manually unless operating under the MEL.

In addition, cockpit workload should not be excessive, and the crew briefing shall be explicit in stating where the manual handling segment starts and ends. Night offshore let-downs, approaches, and circuits/patterns shall not be flown manually.

2.5.3 Automation fly through

As a general principle, once the automation is engaged, it should be left to do its job. Any attempt to 'help it along' may just 'confuse it' and can result in an unexpected aircraft state once the pilot releases the controls. If the rate of change of parameter is too slow using the normal control beep switches, it may be possible to press the appropriate trim release, fly to and set the new required datum (for example airspeed) then release the trim button again. Be wary of disengaging a single axis to make a change in the datum; far better to anticipate changes in sufficient time for the automation to make them on your behalf.

2.5.4 Automation serviceability

Automation serviceability and how it should be restricted to avoid potential approach profile mismanagement is complex as aircraft differ in design and concept of operation. It is therefore impossible to provide accurate guidance for each aircraft type but rather a set of guidance principles that should form the basis of changes to an Operator's Minimum Equipment List (MEL) not necessarily provided as part of a master MEL (MMEL). In essence, additional restrictions should be considered over and above those recommended by the manufacturer's MMEL where enhanced safety is required during the approach phase of flight.

Automation serviceability recommendations

1. Any item that restricts the functionality of the autopilot should restrict operations to day VMC only.
2. Inoperative collective axis trim will require the aircraft to be flown in 3-axes and will require enhanced monitoring and crew discussion. For climbs and descents, unless it conflicts with the design of the automation, it is strongly recommended that airspeed should always be coupled to the cyclic pitch axis and the vertical profile controlled manually on the collective. This is particularly important in the event a go-around is required. Both pilots must confirm the correct go-around power is set and the additional monitoring required by this non-standard configuration shall be covered in the approach briefing.
3. The MEL may make provision for system unserviceability to permit ferry flights or single flights back from offshore in other than day VMC conditions, to allow recovery of the aircraft to a maintenance base, provided such unserviceabilities are permitted by the MMEL.

CAUTION: Operations manuals should clearly detail modes and combinations of modes that present additional hazards due to mode confusion. Examples of these potentially dangerous practices include:

- Reducing collective pitch to reduce airspeed when the cyclic pitch axis is coupled to the vertical profile and not IAS
- The reduction of airspeed when coupled to a vertical mode without IAS engaged.

Section 3 Departure Guidance



Section 3

Departure Guidance

3.1 Departure guidance introduction

A recent review of operator incident reports revealed a concerning trend in departure related aircraft upset, particularly in reduced visibility. This guidance is geared towards departure procedures, with particular focus on Night and other DVE conditions. Helicopters have a unique issue where on certain types of departures, the pilot's acquisition and maintenance of external references becomes compromised with height gain. This can become exacerbated at night or in DVE and creates a fertile environment for Spatial Disorientation potentially resulting in loss of control on departure. It is therefore imperative that operators adopt standardised and robust procedures during the departure phases to mitigate against this loss of control risk. A key element is the adherence to standardised departure profiles as recommended by the OEMs.

3.2 Standardised departure profiles

Standardised departure profiles are at the core of a stabilised departure, particularly in reduced visibility. They should remain consistent with OEM guidance regardless of environmental conditions whenever possible. OEMs develop and publish departure profiles specific to each aircraft type; however, the underlying

philosophy and technique of each remains largely consistent to satisfy any specific performance requirements.

IOGP Report 690-2, Flight Operations, Section 9 specifies that:

"All CAT operations to offshore destinations are carried out in PC1, PC2E, PC2DLE, or PC2.

Onshore take-offs, departures, approaches, and landings for the purpose of carrying passengers are conducted in accordance with PC1 criteria, unless specific circumstances dictate the use of PC2 criteria and then only when a safe forced landing can be assured in the event of a critical power unit loss.

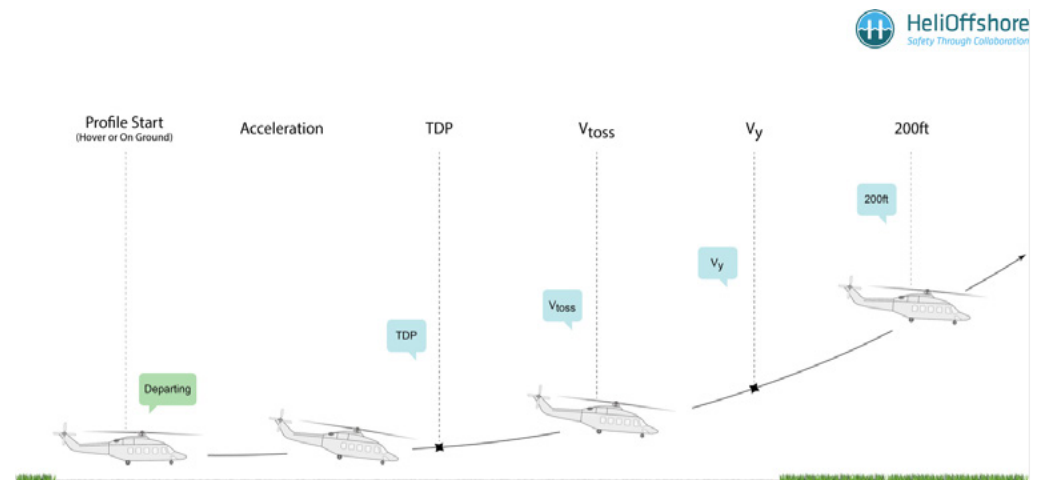
When performance planning for offshore take-offs, departures, approaches and landings, there is no exposure to deck edge strike or to a forced landing in the event of a critical power unit loss.

The RFM PC1/PC2/PC2DLE/PC2e flight profiles are used, both onshore and offshore, as appropriate. (It is acceptable to vary from flight profiles if published in the Operations Manual provided that the aircraft mass is in accordance with the approved performance data.)"

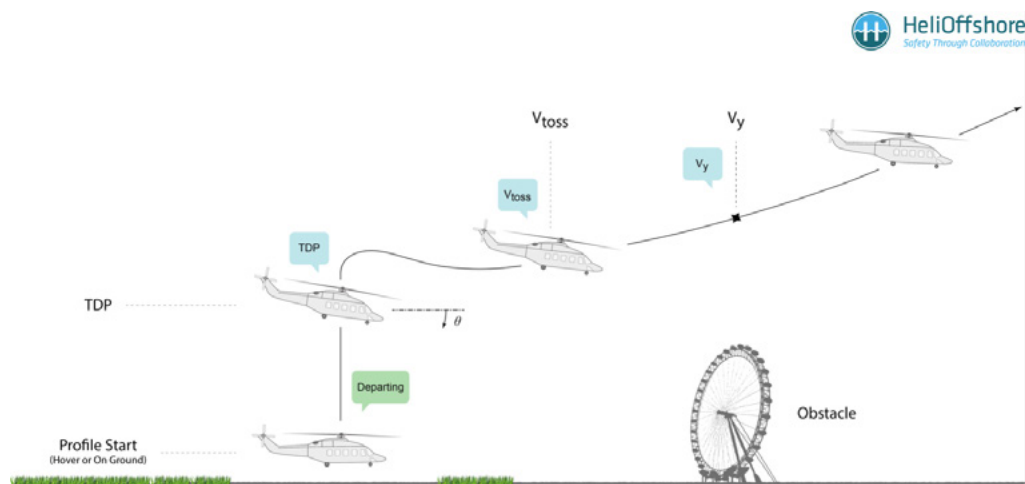
Four typical profiles are outlined below, with the diagrams presenting a visual representation of each. Clarification of key flight parameters and handling techniques is critical to facilitate the PM's task of monitoring the flight profile. These may include, but are not limited to:

- TDP
- Pitch attitude change at rotation – absolute or Δ (delta change)
- V_{toss}
- Power settings/margins
- Use of AFCS upper/coupled modes
- Use of Force Trim Release
- Standard Calls

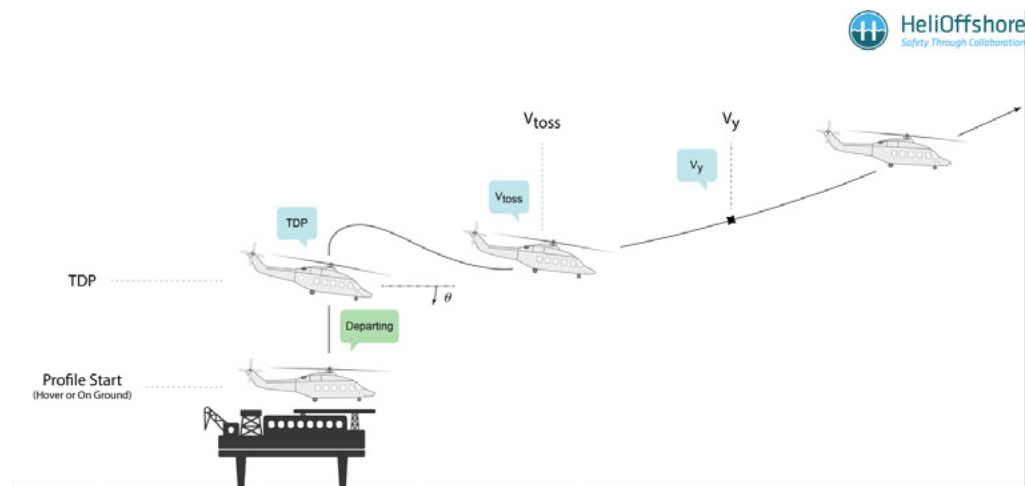
3.2.1.1 Example Clear Area Take-Off



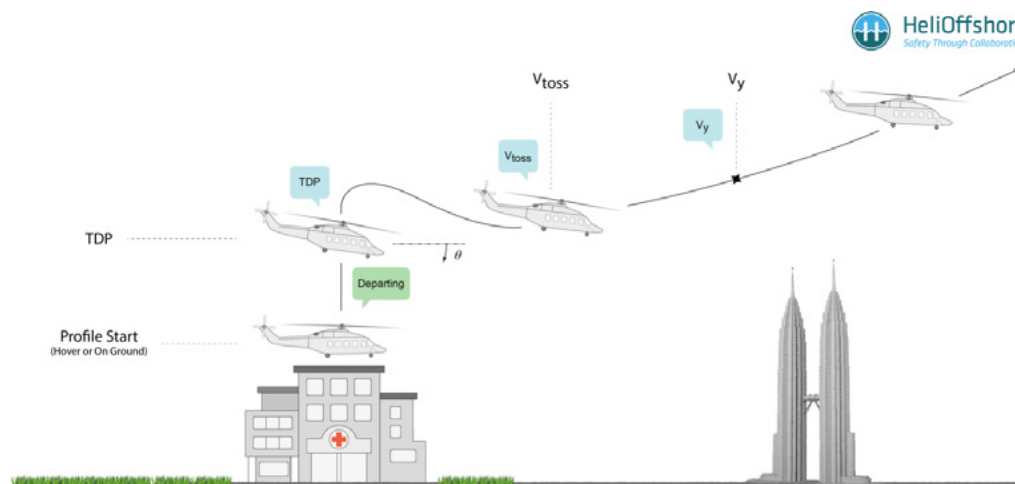
3.2.1.2 Example Vertical Ground Helipad Take-Off



3.2.1.3 Example Offshore Elevated Helideck Take-Off



3.2.1.4 Example Onshore Elevated Helipad Take-Off



3.2.2 Cockpit configuration and Energy State Monitoring

While standardising departure profiles helps satisfy prescribed performance requirements, establishing and publishing standard cockpit configurations for each profile aids Workload Management and Situational Awareness, benefiting both the PF and the PM while operating low level at low airspeeds. Standardised display configurations also help ensure the PM has the necessary information optimally presented to facilitate monitoring and any departure-specific SOPs.

In addition to the basic flight manoeuvre, operators should provide clear guidance tying their standard operating procedures (MCC, cockpit setup, monitoring calls etc.) to each departure profile.

3.2.3 Use of Force Trim Release (FTR)

The Force Trim systems in most helicopters are well integrated into the flight control and automation systems. How the force trim release is used, particularly during the departure phase is critical to safe outcomes. Pilot manipulation of force trim systems directly affects automation behaviour. For example, inadvertent or inappropriate engagement of the collective force trim release may cause a power reduction in a climb and a resultant descent which may be unnoticed by the crew. Therefore, operators should establish a policy in their operations manuals and training programs on appropriate use of force trim release during departure, in line with the OEM's philosophy on FTR use.

3.2.4 Rotation point

The point of rotation during the take-off phase should be guided by manufacturer philosophy. In low visibility environment, somatogravic illusion presents a significant threat that may lead to disorientation and loss of control. However, simply adhering to OEM recommended take off profiles does not eliminate the issue of disorientation. For example, some helicopters may have a lag in initial display of airspeed on departure. This phenomenon may cause crews to exceed the recommended pitch change and/or fixate on the airspeed indicator, leading to a degraded climb and eventual loss of control. Operators should consider including in their operations manuals standard phraseology to be used for pitch deviations. Operators should also include in their training programs, annual training to raise awareness on the effects of somatogravic illusions during departures in limited visibility.

In some cases, a departure will involve a crosswind component. This serves as an essential discussion point on aircraft performance (out of wind) as well as reference for deviation calls; any aircraft limitation relative to crosswind must be discussed and mitigated prior to take off once the desired departure heading is agreed. This is of specific importance for vertical “confined” departures such as offshore. From the rotation point – whether the flightpath is forward or sideways – the briefing should state the PF’s manoeuvre intentions to ensure a common situational awareness from TDP through to V_{toss} .

Note: For vertical helideck take-offs, the ideal TDP height is normally a fixed value, but conditions may dictate otherwise. It may not always be possible to comply with the OEM published profile, particularly if there are obstacles in the flight path such that sideways or even rearward movements are required during take-off. Furthermore, the PF may have to rotate (TDP) earlier than normal during night operations due to loss of visual references.

3.3 Departure gates

The departure phase presents a unique challenge where the aircraft energy state is at its lowest and therefore leaving limited options for the crew to correct any undesirable states. It is therefore critical to adopt manufacturer recommended departure profiles supported by adequate briefings and effective monitoring. Defining gates during the departure, in accordance with the standard profiles, provides an additional line of defence whereby briefing, monitoring and automation are integrated into the energy state and flight path management during this phase. The following sections outline recommended procedures based on the recommended gates:

- a. On ground
- b. Hover to TDP
- c. TDP to V_{toss}

Note that gates are continuous – not all actions occur at the exact time the gate is met.

3.3.1 On ground

Effective planning and briefing prior to take-off have demonstrated to be a potent threat and error management tool; not only related to the departure phase but for the entire flight. Operators should include in their operating procedures the need for structured pre-departure briefings.

Operators who have adopted standardised profiles with well-defined crew duties may elect to carry out abbreviated “standard” departure briefings requiring only the dynamic components of the procedure to be verbalised. During a standardised departure, it is assumed both pilots understand their respective duties both in terms of achieving and maintaining published performance targets for the PF and providing monitoring support through standard callouts from the PM.

Operations Manuals should clearly document briefing requirements to include:

- Discussion on avoidance of, or mitigation against known threats on the departure.
- Take off profile management criteria to include power settings, attitude control and target airspeeds and altitudes
- Runway or Helipad to be used
- Initial Altitude
- Manoeuvring required to align with planned departure path
- Emergency Recovery – Runway/ approach, diversion plan or take-off alternate (if applicable)
- Use of Automation and configuration
- PM and PF roles on the departure

Note: If using any non-standard procedure, all applicable calls must be briefed.

3.3.2 Hover to TDP

A stable departure is largely dependent on a stable and predictable hover. The PM must always closely monitor for drift and any other deviations from the briefed departure plan.

During operations in DVE, crews should be aware of the possibility of Expectation Bias where the perceived departure path of the aircraft does not coincide with actual aircraft position and projected flight path. The following factors should be considered prior to entering a hover for departure.

Factor	Considerations
Stability of the hover	Hover height, drift, visual cues
Aircraft integrity and Configuration	All parameters within limits, Equipment set appropriately
Take Off Path	Obstacles, Effects of wind velocity and other environmental conditions on perceived aircraft position
Power Use	Required power for briefed profile, margin, application

Note: Operators are advised to ensure the aircraft weather radar is in a safe configuration when operating in close proximity to helideck crews.

3.3.3 TDP to V_{toss}

Operators should specify the following as a minimum with respect to the TDP Gate and the subsequent flightpath to V_{toss} . The procedures should provide guidance on monitoring of performance (energy state), automation and other pertinent criteria.

For a clear-area take-off, the TDP speed may be variable depending on aircraft mass, take-off distance available and atmospheric conditions. Most helicopter types operate with a fixed TDP with the option of adjusting to an exact value if required to meet the performance criteria. For a vertical take-off, the TDP is defined as height above the take-off surface. The TDP gate ends when the helicopter has reached V_{toss} .

Normal & Deviation Calls: For all take-off profiles, the SOP guidance should include calls relevant to the profile e.g., power setting, TDP, vertical speed, aircraft pitch attitude. Deviation calls from the briefed flight path as well as to the normal profile criteria including an undesired aircraft state with negative energy should be included e.g., an excessively high rate of descent with an aircraft pitch attitude below the profile criteria or a high climb rate with insufficient or decreasing speed.

Missed calls can also have a significant impact on the take-off profile, especially when taking off from helidecks and perhaps even increase the risk of impact with obstacles. The ability to successfully manage the flightpath relies on robust SOPs detailing limits, deviation calls and their expected responses.

Energy State & Performance: The energy state is communicated through normal calls from the PM who confirms that the PF is following SOP. Any negative change in the energy state should be announced by a deviation call from the PM followed by an action and a response from the PF to return to the desired flightpath and or parameters. For helideck take-offs, CFIT becomes a high-level threat if a negative energy state is not managed correctly within seconds.

Automation: The global helicopter fleet has a range of autopilot capabilities from fully automated helideck take-offs to all manual take-offs beyond V_{toss} . It is recommended SOPs include a detailed description of the preferred modes of operation, but the normal and deviation calls should match as much as possible to ensure consistency across both manual and coupled departures. Where available coupling should be utilised as early as possible during night and DVE departures to reduce crew workload and enhance monitoring of the energy state. Aircraft without this capability require a high degree of crew coordination to address the increased workload. Either way, the operator SOP should describe the crew coordination in detail.

Section 4 Approach and Go-around Guidance



Section 4

Approach and Go-around Guidance

4.1 Approach and go-around guidance introduction

The following Approach Path Management guidance has been developed following a review of operators' stabilised approach criteria and anticipated enhancements in aircraft and terrain warning systems. Rather than simply stipulating specific approach gates similar to fixed-wing stabilised approach criteria, this guidance takes into consideration a range of elements, each providing a specific barrier to helicopter-specific risks or hazards experienced during the approach phase.

4.1.2 Helicopter approach criteria

Stabilised approach procedures should be based on approach gates similar to those employed by fixed-wing operators which define when an approach is considered stabilised and actions to be taken if these parameters are not met.

IOGP Report 690-2, Flight Procedures, Section 32 specifies that:

"The Aircraft Operator has established and documented stabilised approach procedures.

Stabilised approach procedures are documented that define when to conduct a missed approach or abort a landing if deviation criteria for a stabilised approach are not met.

The procedures are written with reference to the HeliOffshore Flightpath Management Recommended Practices.

Stabilised approach procedures are specific to the aircraft type or use a TC Holder issued Flight Crew Operating Manual (FCOM).

Procedures are characterised by defined speeds, climb/descent rate, vertical flight-path and configuration, through a series of defined 'gates' as necessary.

Stabilised approach criteria confirm that:

1. The aircraft is on the correct flight path and only requires small changes in heading, attitude and power to remain on the correct flight path.

2. The aircraft is in the correct landing configuration and all briefings and checklists have been conducted.

3. The power setting is appropriate for the aircraft configuration, not below the manufacturer's minimum if specified in the Aircraft Flight Manual or FCOM.

4. Flight crew procedures include monitoring of the flight path and the requirement to announce deviations and subsequent actions using specified criteria.

Unique approach procedures or abnormal conditions that require a deviation from stabilised approach criteria require a special briefing.

Procedures are in place for no-fault, mandatory go-arounds if any approach not be stabilised, and pilots practice all-engine operating (AEO) go-arounds as part of their proficiency training."

Helicopter approaches should ideally be stabilised by 1000 ft above approach minima, but no later than 500 ft above approach minima in IMC; and by 500 ft above landing elevation in VMC, with the following two exceptions:

- Operations where the transit height is less than 500 ft above landing site elevation: The aircraft should be stabilised prior to descent below 300 ft above landing site elevation and before deceleration below 60 kt ground speed.
- Operations where the aircraft is consistently operating at a low height above the terrain such as seismic work involving external load operations into remote landing sites, requiring a site reconnaissance before landing: The stabilised approach criteria may require modification by the operator. Any changes to the standard criteria should be clearly documented in the relevant Operations Manuals.

A flight is stabilised when:

- a. The aircraft is on the correct flight path and the correct navigational data has been confirmed as entered into the navigation system for final approach to the desired airport, heliport, helideck, or other landing site.
- b. Only small changes in heading, track, and power are required to maintain the correct flight path. It is recognised that certain environmental conditions will require larger power changes than normal.
- c. All briefings and checklists have been completed, except for the final landing check.
- d. The aircraft is in the correct landing configuration. In addition to previously mentioned landing gear, approach speed, and power criteria, there may be other unique, aircraft-specific configuration requirements that should be addressed e.g., rotor speed selection.
- e. The sustained rate of descent is no greater than 700 fpm upon arrival at the stabilised approach gate, or as recommended by the instrument procedure. If an approach requires a rate of descent greater than 700 fpm, this should be clearly briefed, with a focus on procedures to address the higher-than-normal rate of descent.
- f. Once the final approach minimum is reached, confirmation of the correct airport, heliport, helideck, or landing site must be made.

Anytime an approach becomes 'unstabilised' (falls outside the parameters above) a go-around / missed approach should be executed immediately, unless the operator has established a limited number of deviation protocols that can be safely used to return to the stabilised profile.

Further expansion and summary of stabilised criteria can be found in Annex B – Recommended guidance points on stabilised approaches.

4.2 Approach path energy state

To date, stabilised approach criteria often consider minimum airspeed and maximum rates of descent (ROD) as the basis for their guidance. However, the concept of combining airspeed, rate of descent, aircraft pitch attitude, and collective position (power applied) to define an energy state has rarely been addressed. While an HTAWS mode expansion to warn flight crew of an impending low energy state is in development, these systems only provide warnings when a situation has already started to develop. It is therefore essential to establish flight practices and operator guidance to prevent the development of low energy state conditions.

4.2.1 Standardised approach profiles

The use of standard repeatable approach profiles, tailored for specific types where required, enhances the ability of crews to monitor and detect deviations.

HeliOffshore members provided three alternative examples of standardised offshore approaches. The first, developed for the AW139, makes use of a 5° profile that can easily be monitored by the PM, through the use of the FMS and a pseudo-glideslope indicator. It is not intended to be flown as an instrument style approach but rather provides enhanced monitoring tools to ensure a standardised approach is flown both day and night in VMC. The second example is more generic, providing guidance that could be applicable to multiple aircraft types. Both these styles of guidance are valid, and both require approaches to be flown in the same manner, to the same gates and airspeeds regardless of the landing site and regardless of day or night operations. Repeatability is the key to ensuring the aircraft achieves safe, predictable parameters at the LDP every time.

The third example highlights there can be significant difference between day VMC, night and DVE conditions. While approaches in day VMC can be largely based on a standard 'sight picture', a more formalised structure of gates and checkable parameters should be used for night and DVE approaches. These parameters should be simplified to reduce pilot workload and facilitate repeatability. However, there is no reason why all approaches, even in day VMC and in short sector 'shuttle' operations, should not comply with a set starting gate position (e.g., established on the final approach track at 0.5nm) where the established parameters for that specific approach must be achieved.

IOGP Report 690-2, Flight Procedures, Section 33 specifies that:

"The Aircraft Operator has established a procedure for flight crew to confirm the location of offshore destinations.

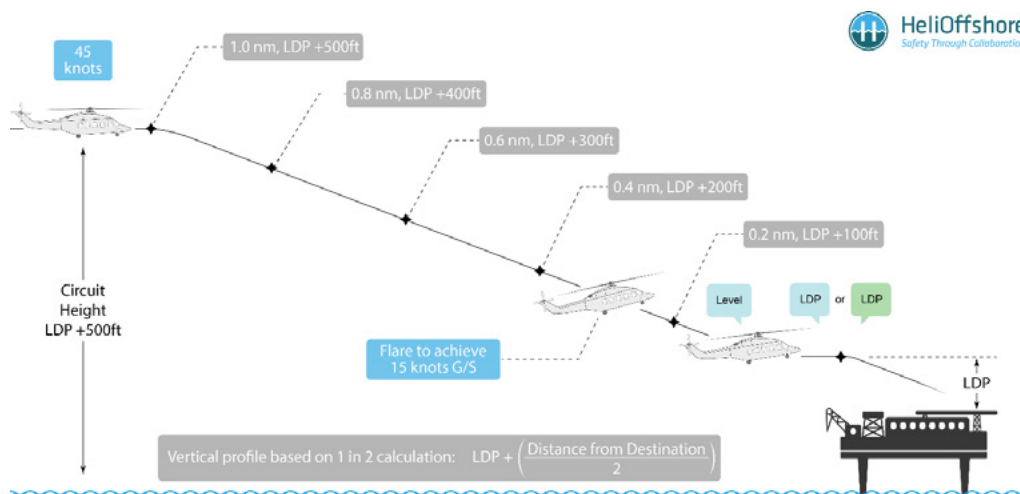
There is a process to identify the relative risk (high, medium, or low) of a wrong deck landing at a particular destination or vessel during flight planning. This process considers factors such as the location of mobile installations and vessels, proximity of adjacent decks, physical similarity of adjacent installations or vessels, similarity in naming conventions, etc.

Procedures are in place to review this risk during all pre-flight briefings and discuss in pre-landing briefings (unless the risk in that area is continuously low).

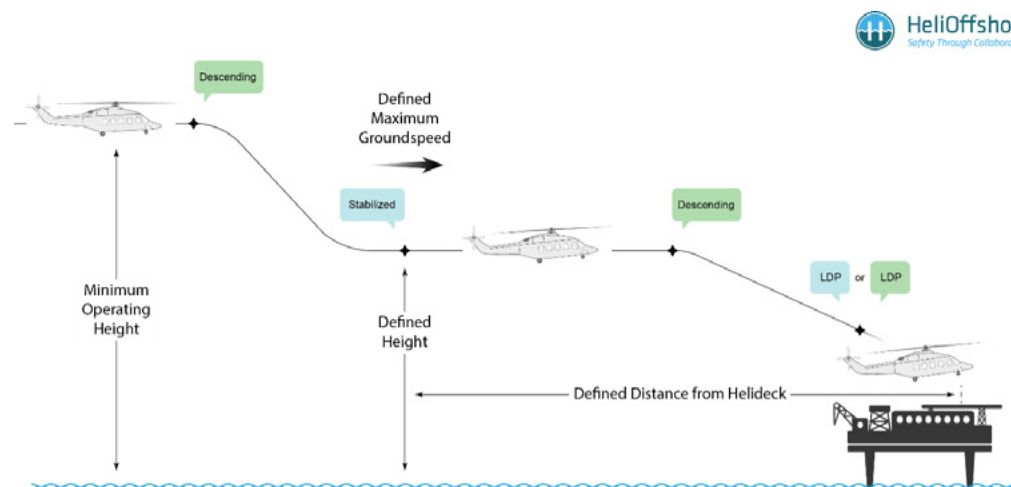
There are procedures in the operations manual/ normal checklists for verification of the destination position and facility name when approaching all vessels and installations."

Approaches to a moving helideck such as a survey vessel or FPSO require the crew to obtain an accurate position for their flight planning. However, it is sometimes possible that for environmental (wind change) or operational reasons the position of the vessel could change significantly. This could lead to a discrepancy between the expected location of the moving helideck and its new position by a significant distance. The orientation of the helideck could also be affected, potentially impacting the crew's planned approach. Therefore, it is imperative the crew receive an updated position report from the destination vessel prior to commencing the approach. Confirmation of the vessel's position can often be conducted by careful use of the weather radar.

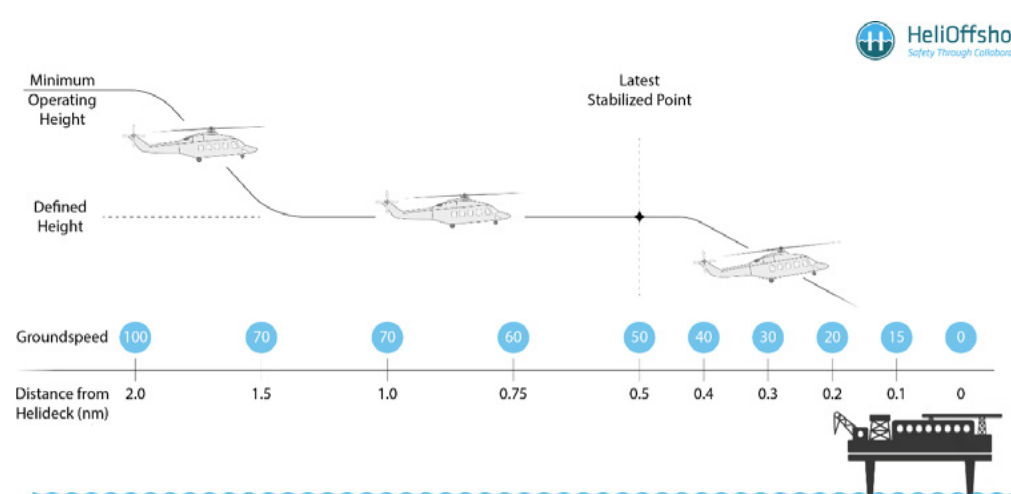
4.2.1.1 Example 1: Defined 5° profile



4.2.1.2 Example 2: Standardised approach criteria



4.2.1.3 Example 3: Day DVE or night offshore approach (not to scale)



4.2.2 Energy state monitoring

The energy state call out is considered critical in preventing CFIT or loss of control events in offshore helicopters. Again, it may not be possible to define these points generically as each aircraft's stability and power characteristics differ, but continuous monitoring gates can be established.

The need for a standard '500 to go' call (for an onshore approach) or a '0.5 NM' call for an offshore approach, defining the stabilised 'gate', warrants examination. Many of the events related to energy state have occurred below this 500 ft level or inside 0.5 NM, suggesting that a continuous monitoring of energy state is more valid than achieving a singular point in space where the aircraft is considered stable. The later in the approach that instability occurs, the more difficult it is to remedy. Operators should ensure their procedures reflect this requirement of continuous monitoring.

For offshore approaches, in DVE or at night, it is important to define criteria that require a go-around to be executed should the approach become unstable between the 0.5 NM gate and the committal point. These should normally include minimum power setting, minimum airspeed and maximum rate of descent. Any landing site that is similarly limited in physical dimension, such as a confined area, should be treated in the same way.

4.2.3 Energy state call outs

Examples of approach minima for speed and power standards include:

1. During approach to a clear area (e.g., runway) the requirement to maintain a minimum of V_y until deceleration is necessary, in compliance with the landing procedure dictated by OEM, operator or regulator requirements.
2. During approach to a landing site of limited physical dimension (helideck/ confined area), the requirement to maintain a minimum of V_{toss} until the transition point is reached.
3. Specify a minimum power setting when operating below a certain speed, combined with prescribed calls to initiate a go-around (note this type of call may be aircraft-specific).

4.3 Approach briefing

Approach briefings can be considered in two parts; the details of the approach being flown be it visual or procedural, and the way the aircraft is to be flown. The following is recommended for approach briefings:

- a. An approach briefing should be given for each landing. The briefing should be completed before the top of descent for an instrument approach and no later than the Before Landing checks for a visual approach. Where available, coupled modes should be used during the approach briefing to reduce workload. The briefing should be conducted by the appropriate crew member dictated in operational guidance for a given situation. Briefings

should be fully interactive with each item briefed and confirmed during the briefing to ensure mutual understanding between pilots and to verify accurate settings. If either pilot has any misunderstanding, both pilots should resolve the issue during the briefing, to mitigate any misunderstandings during the actual approach.

- b. It is recommended that operational guidance describes how the crew will prepare the cockpit in advance of the briefing (setting up of required approach aids, frequencies and so on). This minimises the chances of interruptions while further adjustments are made to system settings, reducing the possibility of essential steps being missed. During the briefing, the briefer points out the settings to verify the setup matches what is required in the procedure and is duplicated on both sides of the cockpit as applicable. This provides redundancy (dual confirmation), reducing the time required for the briefing.
- c. Separate the section of the briefing that refers to aircraft management and ensure that both pilots understand the IAS, ROD, and anticipated power settings for the approach. Highlight the areas for the specific approach where particular focus may be required, such as higher rates of descent when a downwind component is present. It is accepted that heading changes may be required during the final stages of an offshore approach, especially if the approach track is not aligned with the wind due to obstacles in the approach path, requiring alignment into wind at a late stage.

However, flight path (track) changes should always be minimised when possible.

- d. Brief a go-around procedure including the aircraft management parameters such as speed, rate of climb, power, heading, and automation usage. All of this should be SOP requiring minimum briefing, but any non-standard items should be briefed in detail. Discuss the various possibilities that may lead to a go-around late in the approach. Some examples include, loss of visual references due to heavy rain showers, patchy fog, or last-minute problems at the landing site. This section of the briefing should also be interactive, and each pilot should articulate what is expected of their position during the go-around.

Note: In the context of approaches and automation, any variation to standard automation operating procedures should be briefed separately with particular attention drawn to the potential consequences and the required additional monitoring.

4.4 Monitoring procedures during approach

Monitoring procedures are essential during all phases of flight and have been covered in section 2.2, however approaches require discipline, focus and strict adherence to SOPs.

4.4.1 Deviation calls

Deviation calls during an approach should therefore be based upon the following criteria:

1. Pilots should make deviation calls as soon as a deviation is observed outside of defined limits to ensure the maximum time for correction before an unacceptable flight condition occurs.
2. The thresholds should be set at the point where a deviation is rare but equally at the point where a recovery is still possible with minimum intervention. These settings should also ensure the PM is not required to make constant calls for minor deviations such that PF becomes immune to PM's input and therefore fails to take action when it really becomes necessary.
3. Pilots should acknowledge all calls. Lack of acknowledgement may indicate early signs of incapacitation.
4. Any deviation call should be acted upon immediately, not simply acknowledged.
5. If the stabilised criteria are not re-established, the PM shall command a go-around and PF shall comply immediately. If stabilised criteria are not maintained during a go-around the PM may need to assume control.

6. Operators should develop a non-punitive go-around policy that views all go-arounds as a safe choice, regardless of reason. Examples could include ATC requirements; deteriorating meteorological conditions; or misjudgement of visual approach.

4.5 Approach-specific automation guidance

General guidance relating to the use of automation is contained in section 2.5, but there are some specific and important considerations that relate to approaches.

4.5.1 Offshore approach at night or in DVE

Whenever possible, a straight-in landing is preferred. If a circling approach is unavoidable, it should be flown coupled in 4-axes, with PF adjusting ALT, HDG and IAS through beep trims while maintaining visual cues until the LDP.

The use of automation for offshore approaches should be integrated into the specified approach profiles as described under energy state earlier in this guidance document.

Note: Certain aircraft types require the final stages of offshore approach profiles to be flown at speeds below the minimum coupled speed. This type of restriction requires manual flight on final approach and reinforces the need for standardised approach profiles.

Note: In some cases, it may be easier to manually fly the lateral profile rather than coupled to HDG; this is acceptable provided

the vertical (altitude hold, radar altitude hold, or vertical speed) and IAS modes remain engaged.

4.5.2 Onshore approach

The variety of available onshore approaches and the range of automation available to conduct these various approach types makes the application of standardised criteria across multiple types difficult.

However, the application of the standard automation principles in section 2.5 and the energy state monitoring criteria in section 2.4 should aid the safe conduct of all types of onshore approaches.

4.6 Go-around management

While operations manuals should include a focus on the need to address go-around procedures in every approach briefing (see Section 4.3d), attention should also be drawn to the Human Factors barriers that may affect the decisions made with regard to a go-around.

An AEO go-around is a flight procedure that is often neglected in both preparation and training. Statistics, kindly provided by the LOSA Collaborative identify a strong tendency for fixed-wing crews to continue approaches despite deviations outside of company published stabilised approach criteria, suggesting a reluctance to execute a go-around. That reluctance tends to stem from a powerful desire to complete the landing. Historic culture supports landing at the planned destination as the only possible positive outcome. That desire can be coupled with other human factor pressures.

Factors that lead to a breakdown in procedural discipline include fatigue, company pressures, customer pressure, fuel state, deteriorating weather, and the powerful desire to land at the destination. That desire to land can also intervene during a go-around. Once the go-around is initiated, the crew must maintain commitment to a stabilised go-around, even if the landing area suddenly becomes visible after the go-around is stabilised. Procedural discipline is supported by strong policy and safety culture. Operators should develop a clear no-fault policy of supporting a crew's decision to perform a go-around regardless of the circumstances. A stabilised, successful go-around will always yield better results than an unstabilised approach.

Data gathered from 53 fixed-wing LOSA programs conducted from 2015 to 2020 indicate that 411 Unstable approaches, as defined by the specific companies and witnessed by observers, were continued to a landing. Of these approaches 55 percent were flown by the captain of the aircraft. Only 12 unstable approaches resulted in missed approaches being flown.

Observations have also suggested that missed approaches are often poorly managed, prompting a revision to the observation criteria and the acquisition of additional data. As more LOSA observations are gathered by the offshore helicopter industry it should become more apparent as to whether similar areas of concern exist.

It cannot be over emphasised, however, that a revision of procedures and dedicated training scenarios should be considered as part of the overall approach management system within all companies.

The considerations during the go-around of a large jet are complex due to aircraft configuration changes such as flaps and the associated speed restrictions. Likewise, for a helicopter at low speed with a high pitch-up attitude, at night, at 90 degrees offset to the destination, a go-around can be just as complex: the helicopter requires a substantial change in pitch attitude to accelerate to V_{toss} , while minimising height loss; the PF needs to transfer their scan rapidly from outside to inside; and the PM needs to monitor the attitude, power, and flight path very closely. Regardless of aircraft type and the technical requirements of a go-around, the overriding human factor issue is that crews are landing 'focused' and often mentally unprepared when a missed approach is required.

Furthermore, helicopter training has often focused on the need to train the go-around from instrument approaches with one engine inoperative (OEI) and rarely reflects an AEO go-around from an unstabilised approach. Operators should consider devoting training time to AEO go-arounds as a result of an unstabilised approach, loss of visual cues, or last-minute problems on the landing site.

Operations manuals should contain not only the instructions and appropriate calls to direct a go-around but also clear simple guidance on how to conduct the go-around. That guidance should include stabilised

go-around criteria for the PF to execute and the PM to monitor, in line with the same philosophy as the approach criteria. This should include direction regarding flight path parameters and the correct use of automation modes including any combination of modes to be avoided. The guidance should address how the energy state and required reactions during a go-around will differ according to situation. A go-around conducted late in the approach at a low altitude with low airspeed is different to a procedural go-around conducted as part of a missed approach procedure. In the case of an instrument missed approach procedure, the aircraft energy state should already be stabilised at an airspeed and track that support an immediate transition to a climb with only a change to climb power. In this condition, stabilised go-around criteria should be set similar to the example shown.

4.6.1 Example 4: Stabilised missed approach criteria

A stabilised missed approach means the aircraft maintains a stabilised airspeed and climb rate, desired flight path and configuration during the initial stages of an IFR Missed Approach to 500 ft above landing surface. The following parameters constitute an unstabilised missed approach:

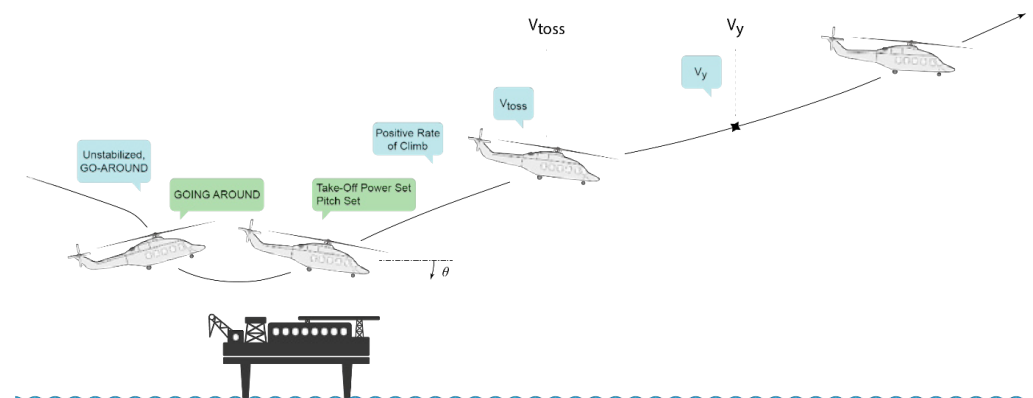
- Excessive pitch, roll or yaw corrections.
- Failure to maintain appropriate airspeed (V_y).
- Failure to maintain a positive rate of climb of at least 500 fpm not to exceed RFM limitations.
- Heading deviations greater than 10 degrees without appropriate correction unless in response to charted procedure.

Upon recognition of being outside the parameters of a stabilised Missed Approach, the PM shall make deviation calls (see Sections 2.2.2 and 4.4.1)

In the cases where the go-around is initiated late in the landing approach, flight path parameters should be re-established that support a favourable energy state. Guidance and training should support the application of take-off power, a pitch attitude that provides acceleration to V_{toss} and subsequently V_y , and a go-around track that avoids known obstacles. Once a positive rate of climb is obtained, along with an appropriate stable climb airspeed, the transition to the previously mentioned stabilised missed approach criteria should be utilised.

4.6.2 Example 5: Go-around from low energy state

IMC or DVE flights can be much more difficult at low airspeeds. Training should be conducted to prepare crews for the challenging task of maintaining flight path management under those conditions.



Section 5 Summary of Recommendations



Section 5

Summary of Recommendations

Operators should establish flight path guidance in their Operations Manuals, Training Manuals, and Checklists for critical phases of flight operations (inclusive of taxi, take-off, cruise, approach, go-around, and landing). As part of this flight path guidance, operators will develop procedures for the use of standardised departures and stabilised approach procedures for all flights (Sections 3 and 4).

Guidance relating to energy state criteria, both during departure and for stabilised approach, is considered an essential element and as such should be incorporated in Operations Manuals (Sections 2.4 and 4.2).

Continuous monitoring of stabilised criteria through multiple 'gates' is more valid or relevant than achieving a single point in space where the aircraft is considered stable. Operators should ensure their procedures reflect this requirement (Section 2.2, 4.2.2 and 4.5).

Briefings should be given for each departure and approach (Section 2.3). Departure briefings should be completed on the ground while approach briefings should be completed before the top of descent for an instrument approach and no later than the before landing checks for a visual approach. Where available, the coupled modes should be used during airborne briefings to reduce workload. Briefings should be interactive to support engagement and focus of all crewmembers. Details should include the intended flight profile, parameter monitoring, specific threats to the departure or approach, how those threats will be managed, reference to any additional go-around or reject triggers, non-standard parameters, or unique landing site requirements. It is also essential to brief how the autopilot modes will be used in each situation (Sections 3.2, 3.3 and 4.3).

Operators should consider devoting training time to AEO go-arounds as a result of an unstabilised approach, loss of visual cues, or last-minute problems at the landing site. The go-around training should be initiated from varying levels of energy state, to include the more challenging low speed regimes (Section 4.6).

All operators are encouraged to include standard calls for normal operations and for deviations from normal flight profiles. Calls should be kept to a minimum, be logical and only used where a missed call or event would have a negative safety consequence (Section 2.2).

Operators should ensure that their operations manuals clearly detail procedures for the use of automation and, if OEM guidance (for example, FCOM) is unavailable, explain automation modes and combinations of modes that may present additional dangers due to mode confusion. Specific consideration should be given to automation training requirements to ensure all protection modes are fully understood (Section 2.5).

Operators are strongly encouraged to implement the Recommended Practices as outlined in this document. To enable effective implementation through a gap analysis with existing company operations manuals and policies, HeliOffshore provides an **Implementation Tool-Kit** which operation member representatives can access through their HeliOffshore Space accounts.

HeliOffshore intends to continuously review, develop and enhance these Recommended Practice documents and as such user feedback is greatly appreciated.

For feedback or details on how to access the Implementation Toolkit, please email info@helioffshore.org

Annex A Example briefings and callouts



Annex A

Example briefings and callouts

Example full instrument approach briefing:

Contents:

- a. Plate number, name, and date
- b. Follow the briefing strip order, i-viii if applicable but in any case, the following items are to be included:
 - i. Approach type
 - ii. Navigation aids (Radio and/or GPS setup and requirements)
 - iii. If raw data or coupler/flight director will be used
 - iv. Speeds
 - v. Arrival: STAR arrival route
 - vi. Procedural sector
 - vii. FAT crossing altitudes and timing
 - viii. Minima and weather
 - ix. Runway elevation
 - x. Actions at minima
 - xi. Missed approach procedure including planned alternate and fuel requirements
 - xii. Any airfield or heliport special briefings

Abbreviated IFR approach briefing:

- a. ILS (or other approach) to runway XX at.....
- b. FAT is.....°, DA/MDA is.....ft, minimum RVR ... metres
- c. Runway elevation is
- d. Commencement and continuation of approach
- e. I will fly 4-axes coupled / 3-axes coupled/ raw data approach
- f. My landing/your landing (subject to weather)
- g. Go-around procedure will be.....

Example abbreviated offshore landing briefing:

1. Standard offshore landing, heading XX
2. Go-around to the right/direction XX
3. Review any turbulent arcs, obstructions or restricted landing arcs if applicable

Briefing

Pilot flying	Pilot monitoring
Plate 11-1, ILS Y dated 2 October 2019	I have the same
ILS to runway 03, ILS frequency 109.75, tuned and identified CVF my side	109.75 tuned and identified I-ABC my side
Final approach course 034 set my side	034 set my side
I will fly 4-axes coupled at 100 kt. No STAR, it will be radar vectors. Crossing altitude 1,340 ft at 4DME.	1,340 ft at 4DME
Weather is above minima, there is no approach ban. Elevation is 210 ft, bug set at 410 ft.	Bug set 410 ft
Assuming you are visual at minima I will continue to fly the approach fully coupled until I am happy with the visual references, then decouple and land	Understood
If we have to go around, standard missed approach procedure is straight ahead to 2,000 ft then start a left turn back to the NDB to hold at 3,000 ft	I will set ALTP to 3,000 ft once we start the descent. NDB is tuned and identified 397 DEF and set on the RMI.
We have enough fuel for two approaches before we need to divert to XXX	I agree

Example calls, onshore instrument approach:

Flight event	Pilot monitoring		Pilot flying	
It is recommended that the PF maintain reference to the instruments while PM looks for visual references and monitors the approach.				
	ACTIONS	CALL OUT	ACTIONS	CALL OUT
At first inward movement of localiser bar		“Localiser alive”		“Checked”
At first downward movement of glideslope pointer/bar		“Glideslope alive”		“Checked”
If flown coupled, at localiser/ glideslope capture		“Localiser/ glideslope captured”		“Checked”
FAP inbound	(note a)	“FAP”		“Descending”
500 ft above DA, stabilised approach		“500 ft to go, stabilised”		“500 to go, stabilised”
or		or		or
500 ft above DA, not stabilised		“500 ft to go, not stabilised, go around”		“Going around”

100 ft above DA		“100 ft to go”		“100 to go”
At or just before DA	If PM has required visual references	“Visual” or “Visual, Runway, 11 o’clock” or “Visual, lights straight ahead”	If PF has required visual references	“Visual, Landing”
	If not visual (note b.)	“DA, Go around”		“Going around”

Note:

- Normal SOP calls and checks regarding FD selections, DAs, and bug settings are applicable during the approach
- The “DA, Go around” call should be made in time to allow the go-around decision to be made at the minima

Example procedures for automation management and standard calls

Autopilot – Coupler/flight director modes

When available, it is recommended to operate the aircraft coupled, encouraging better overall management of aircraft systems, navigation, and passenger comfort. It is important to involve both pilots in the process at all times to maintain a closed loop. All mode selections and de-selections shall be announced, and confirmed by the other pilot. PF may make mode selections himself or may request the PM to make selections, in particular at times of high workload. All mode selections below 500 ft at night or in IMC should be made by the PM, on the PF's request, with the exception of modes that may be selected directly by buttons on the flight controls and full disengagement of the coupler/FD. While PM may adjust mode values at PF's request, PF may only adjust coupled mode values, provided it can be done using buttons on the flight controls; PF shall call the adjustments being made (for example, to IAS, HDG or ALT), so that PM is aware and can monitor.

Coupler/FD management

There are three steps. PF can start at step one or two depending on who is pressing the button on the coupler panel. PM will respond with the next step in line, and so forth. If the modes couple automatically, PF calls “**Captured**”.

When altitude change mode is used (ALTA/ALTP), both pilots shall confirm that the desired altitude is set with reference to the correct altimeter sub-scale setting. The pilot not selecting the altitude change mode shall

then confirm that the correct vertical mode engages. Do not select the next desired altitude until clearance to climb or descend has been received, to avoid inadvertent altitude changes.

Deselection of a mode shall also be requested or announced. All decouple alerts shall be acknowledged, either with the procedure below, or if an unexpected alert is heard, with a clear statement of what has changed.

The three steps are command, action, and confirmation:

- a. Command (request a mode, if required)
- b. Action (mode selected or armed): Visually locate the mode select button in question, select the mode, and look for the expected mode annunciation and aircraft reaction
- c. Confirmation (correct indication displayed on the Flight Mode Annunciator): Visually verify the correct mode annunciation and that the aircraft reacts accordingly

PF asks PM to couple a mode

PF	PM
“Select altitude”	
	“Altitude selected”
“Altitude captured”	

PF couples a mode himself

PF	PM
“Altitude selected”	
	“Altitude captured”

The helicopter is coupled in VS and reaches the acquired altitude

PF	PM
“Altitude captured”	
	“Checked”

PF asks PM to arm localiser

PF	PM
“Arm localiser”	
	“Localiser armed”
Pause	
“Localiser captured”	
	“Checked”

PF arms the localiser

PF	PM
“Localiser armed”	
	“Checked”
Pause	
“Localiser captured”	
	“Checked”

Note: If there is a pause between a mode being armed and the mode capturing, the other pilot responds with “Checked”. When manually flying the aircraft by command bars only, the same terminology is used, however, the PF should add the words “**Display Only**” after the word “**Captured**”. For example “**Localiser captured – display only**”.

Annex B Recommended guidance points on stabilised approaches



Annex B

Recommended guidance points on stabilised approaches

1. Stabilised approach:

The purpose of a stabilised approach is to ensure the helicopter is in the correct configuration, on the correct flight path, and within the correct parameters for the intended landing type (class 1 or 2, hover or running). The aim is to provide safe, repeatable, and consistent parameters at the LDP to minimise pilot workload and to provide a favorable energy state in support of safe approaches down to the termination point. The diversity of operations, environments, and OEM guidance makes a fully encompassing list of stabilised criteria difficult to produce. However, recommended guidance points in this annex can be applied to the majority of operations.

An approach is stabilised when the following criteria are met:

1. The helicopter is in the correct landing configuration, with the exception of speed limited selections for example, NR
2. The helicopter is on the correct (briefed and agreed) flight path within permitted tolerances and this can be maintained using angles of bank and rates of descent within stabilised limits. Normal limits should be defined by the Operator and may be, for example (these examples are not definitive):

- Speed fixed for an instrument approach (within ± 10 kt of briefed speed), or appropriate to the distance to go for visual approaches.
- Rate of descent no greater than 700 fpm. If an approach requires a rate of descent greater than 700 fpm, this should be clearly briefed, with a focus on procedures that should be used to account for the higher-than-normal rate of descent.
- Steady power setting (except that when coupled in 4-axes / 3-cue, variations of power demanded by the AFCS to maintain the approach parameters, especially in turbulence, but are acceptable within the context of a stabilised approach). Additionally, some automation systems have an automatic approach deceleration mode, which would also be an acceptable AFCS commanded power change.
- Bank angle variations less than 20 degrees.
- Within half-scale localiser or glideslope deviation or 5 degrees of RMI bearing.

Approaches should be stabilised from defined gates (for example as described below):

1. Onshore instrument approaches should ideally be stabilised by 1,000 ft above approach minima, but no later than 500 ft above approach minima.
2. Onshore visual approach, from 500 ft above landing site elevation.
3. Onshore circling segment of any approach shall have wings level at 200 ft above airport elevation
4. Offshore approaches, from 0.5 NM from the installation if distance is used, or 300 ft above landing site elevation if based on altitude.
5. For low-level SAR and EMS operation, the helicopter shall be stabilised from the point of starting the final descent for landing and in any case before LDP +50 ft, as appropriate.

Just before reaching the gate, PM shall check that the required criteria are met; if they are, the PM shall call "Stabilised". If any of the criteria are not met at the gate, PM will call "Not stabilised, go around".

The stabilised approach is terminated for onshore instrument approaches at the MAP, when either a missed approach is initiated or the aircraft is manoeuvred to land, and

terminated for visual approaches at LDP or the equivalent point for Class 2 landings. For ARAs, the visual segment after the MAP is flown as a stabilised visual approach up to the helideck descent point. All parameters should remain within the deviation limits.

2. Unstabilised approach:

An approach is unstabilised if any of the following criteria are met by the defined gate, or after passage of the final gate (these examples are not definitive):

- Rate of descent above 700 fpm and not correcting.
- Speed significantly above or below the requirement (for example deviation greater than ± 10 kt on an instrument approach and not correcting).
- Deviation of half scale or greater on localiser or glideslope or 5 degrees or greater on RMI bearing.
- Height below final approach height offshore before helideck descent point.
- Any TAWS/EGPWS alert.

3. Key considerations and threats for the go-around:

- Why was the go-around required? Aircraft problem, airfield/helideck problem or weather problem (for example loss of visual references, windshear)
- Was the go-around due to an unstable approach?
- What parameter was unstable?
- How will this affect the go-around? For example was the airspeed low or the rate of descent high? Both of these will cause piloting difficulties in converting to the required go-around profile.
- Was the aircraft coupled, and in what configuration (4-axes/3-cue or 3-axes/2-cue), or was it being flown manually?
- If the transition to the go-around involves a change of automation configuration, what needs to be managed closely? Does selection of “Go Around” mean that the roll mode drops out? Does the aircraft need to be re-trimmed to ensure that no unexpected attitude changes are introduced when the new mode(s) are selected?

Annex C Automation guidance principles



Annex C

Automation guidance principles

HeliOffshore Automation Guidance – V1.0 December 2016

These guiding principles are offered to ensure effective use of automation. Standard Operating Procedures based on these principles will help to mitigate the risks of interacting with cockpit automation and improve safety performance in usage and monitoring.

Know how and when to use your automation

- Understand when and how your AP is designed to protect the flight envelope.
- Understand the functional capabilities and authority of your AP.
- Clarify use of automated modes during in-flight crew briefings.

Follow your SOPs for autopilot mode selection and deselection

- Ensure the aircraft is properly trimmed and power applied with an appropriate attitude.
- Consider and manage AP usage in 3 stages: (1) pilot intention (2) mode selection, (3) aircraft reaction.
- Use clear and consistent language to announce, confirm and acknowledge AP mode changes and FMS programming updates.
- Communicate misunderstandings or knowledge gaps around mode display symbology.

Use the appropriate level of automation for the situation and be prepared to change as necessary

- Use the AP as an aid to flight; step up and down between levels of automation, as required.
- Be prepared to fly manually if it reduces workload.
- Avoid manual control inputs when AP is engaged.
- Use 4-axes coupling where possible for all climbs, descents and approaches.
- Select a target altitude when making significant level changes.

Be aware of autopilot functional limitations during mixed-mode and degraded operations

- Be clear which channels are controlled through the AP or manually by the PF
- Speed will always be a function of the helicopter's attitude in pitch; be aware of undesired speed changes when IAS mode is not coupled or is degraded.

Take appropriate and timely action when deviations from the desired aircraft state are observed

- Integrate the AP mode indications into your routine scan as PF and PM.
- Clearly announce observed deviations from the intended flightpath and intervene as require

Annex D Abbreviations and definitions



Annex D

Abbreviations and definitions

AEO	All Engines Operative	LOSA	Line Oriented Safety Audit
ALT	Altitude hold mode (of an autopilot)	MDA	Minimum Descent Altitude (on a non-precision or APV approach)
ALTP / ALTA	Altitude Pre-set/Altitude Acquire mode (of an autopilot)	MDH	Minimum Descent Height (on a non-precision or APV approach)
AMG	IOGP Aircraft Management Guidelines	MEL	Minimum Equipment List (produced by an operator and based on, but not less restrictive than, the MMEL, and approved by the operator's national regulatory authority)
APV	Approach Procedure with Vertical guidance	MMEL	Master Minimum Equipment List (a list of equipment permitted to be inoperative, produced by the manufacturer and approved by the certifying regulatory authority (for example EASA or FAA))
CFIT	Controlled Flight Into Terrain	MSA	Minimum Safe Altitude
DA	Decision Altitude (on a precision approach or an approach procedure with vertical guidance)	NDB	Non Directional Beacon
DME	Distance Measuring Equipment (a ground-based navigation aid that permits an aircraft to determine range from it)	OEI	One Engine Inoperative
DVE	Degraded Visual Environment (conditions with visibility less than 4,000 m and/or when there is no distinct natural horizon). DVE includes offshore night.	PF	Pilot Flying
FAF / FAP	Final Approach Fix/Point (the final defined fix or point on an instrument approach)	PM	Pilot Monitoring
FAT	Final Approach Track	ROC	Rate of Climb
FCOM	Flight Crew Operating Manual (published by aircraft manufacturers)	ROD	Rate of Descent
FD	Flight Director	RVR	Runway Visual Range
FSF	Flight Safety Foundation	SOP	Standard Operating Procedures
FOBN	Flight Operations Briefing Note (published by Airbus)	Shuttling	VMC operations between offshore installations or vessels separated by short distances (typically less than 10 NM), normally supported by specific weather and operating criteria. Some operators make use of abbreviated checklists when shuttling to exclude aircraft configuration changes which are not required on shorter sectors.
fpm	feet per minute	STAR	Standard instrument arrival
ft	feet G/S Glideslope (of ILS)	V_{toss}	Take-off Safety Speed (the lowest speed ensuring continued climb performance of at least 100 ft per minute (fpm) with one engine inoperative and landing gear down, at 200 ft above the take-off surface; speed for best angle of climb)
HDG	Heading hold mode (of an autopilot)	V_{mini}	Minimum airspeed under IMC as recommended by the aircraft manufacturer.
(H)TAWS	(Helicopter) Terrain Awareness and Warning System	V_y	Best rate of climb speed (speed ensuring continued climb performance of at least 150 fpm with one engine inoperative and landing gear up, at 1,000 ft above the take-off surface)
IAS	Indicated Air Speed hold mode (of an autopilot)	VMC	Visual Meteorological Conditions (flight in VMC may be performed using visual references)
ILS	Instrument Landing System		
IMC	Instrument Meteorological Conditions (flight in IMC must be performed by reference to instruments)		
IOGP	International Oil and Gas Producers' Association		
kt	Knots		
LDP	Landing Decision Point (the latest point on the final approach where the decision to land or to go around may be made)		
LOC	Localiser (of ILS)		
LOC-I	Loss of Control – Inflight		

FPM specialists are encouraged to participate in our online, secure collaboration tool: HeliOffshore Space.

Operator member representatives are encouraged to complete the gap analysis within the Implementation Toolkit, hosted in the HeliOffshore Space.

You can find out more about HeliOffshore, our safety plan, and the workstreams at www.helioffshore.org

This guidance will be updated regularly. If you have comments or suggested amendments, please email: info@helioffshore.org



HeliOffshore
Safety Through Collaboration

Appendix A.12

*This appendix has been produced to support the Applicant's response to the Examining Authority's Fourth Written Questions – Q4.19. This document should be read alongside **The Applicant's Responses to the Examining Authority's Fourth Written Questions** [document reference 21.5]*

From: [REDACTED]
Cc: [REDACTED]
Subject: RE: Wind Farm Consultation
Date: 25 September 2020 09:17:02
Attachments: [REDACTED]

Hi Adam,

I'm good thanks, hope you are too.

We have consulted with our Newcastle Ijmuiden Captains and they are quite satisfied that we will not be adversely affected.

It is close to our 'Beach Route' which we occasionally use due to the adverse weather.

We can move the WP at North Haisbro slightly to NW; then it should be ok.
Please see attached.

Similarly, our vessels between Immingham and Vlaardingen do not see an issue either.

However, we would like to be kept up to date on all aspects of this project, as before with others.

Thanks.

Best Regards / Med venlig hilsen,

Stephen Fairlie
Director

Marine Standards Channel

[REDACTED]

DFDS A/S
Terminal Control Building
Eastern Docks
Dover
Kent
CT16 1JA
United Kingdom

[REDACTED]

From: [REDACTED]

Sent: 16 September 2020 10:06

To: [REDACTED]

Cc: [REDACTED]

[REDACTED] >

Subject: Wind Farm Consultation

Hi Stephen, hope you are keeping well.

Please find attached a request for consultation regarding the proposed Dudgeon and Sheringham Shoal extension projects. Vessels DFDS operate have been identified passing in the area within which the wind farms are intended to be constructed, and as such we would be grateful for any comments you had on the projects.

If any comments could be sent by the 9th October this would be appreciated, as this would ensure we can incorporate them into our ongoing work. Please feel free to get in touch with any queries in the meantime.

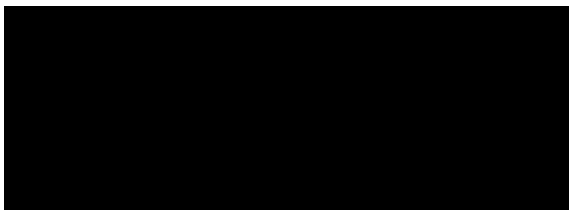
Many Thanks,

Adam Foster

Lead Risk Analyst

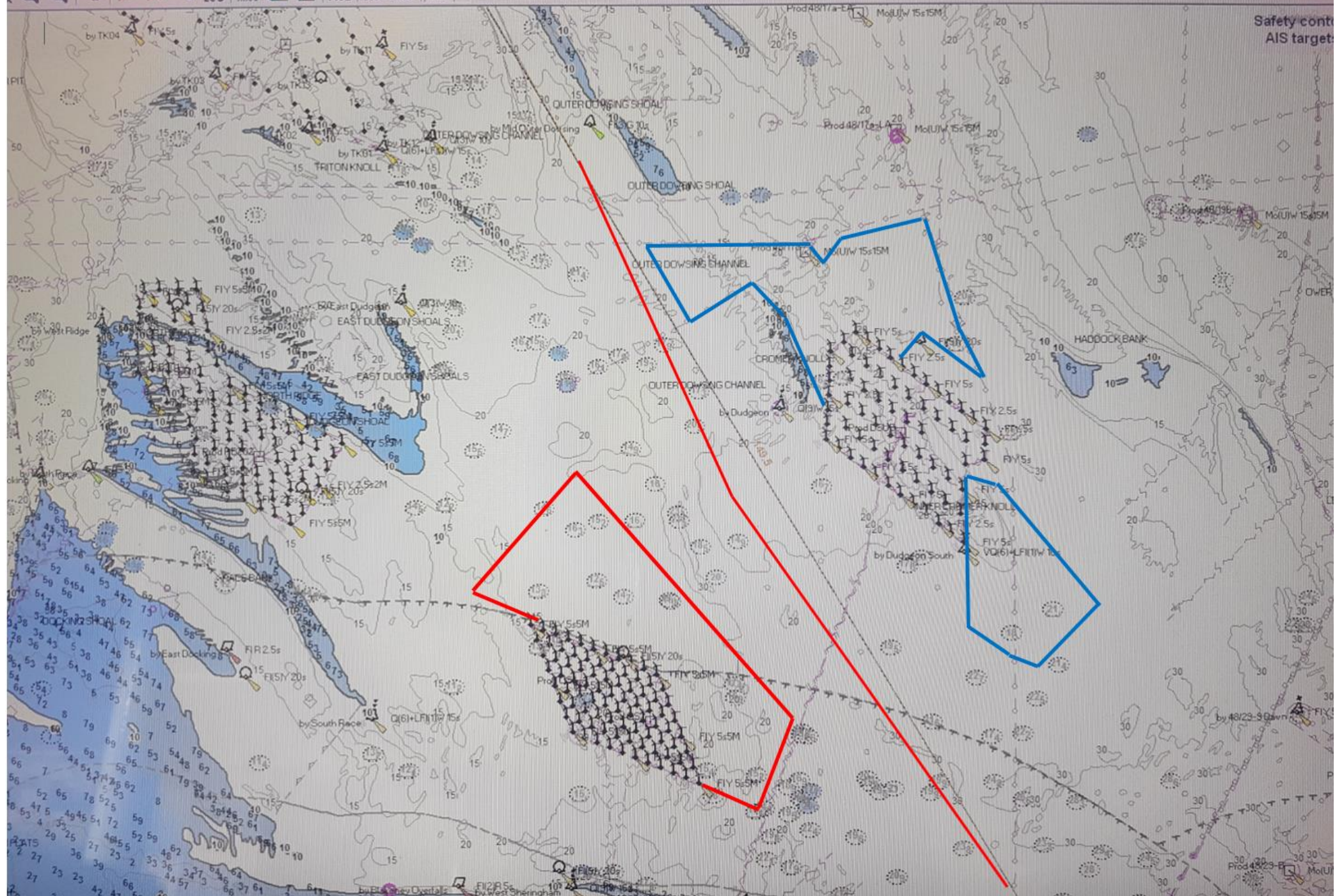
Mobile: [REDACTED]

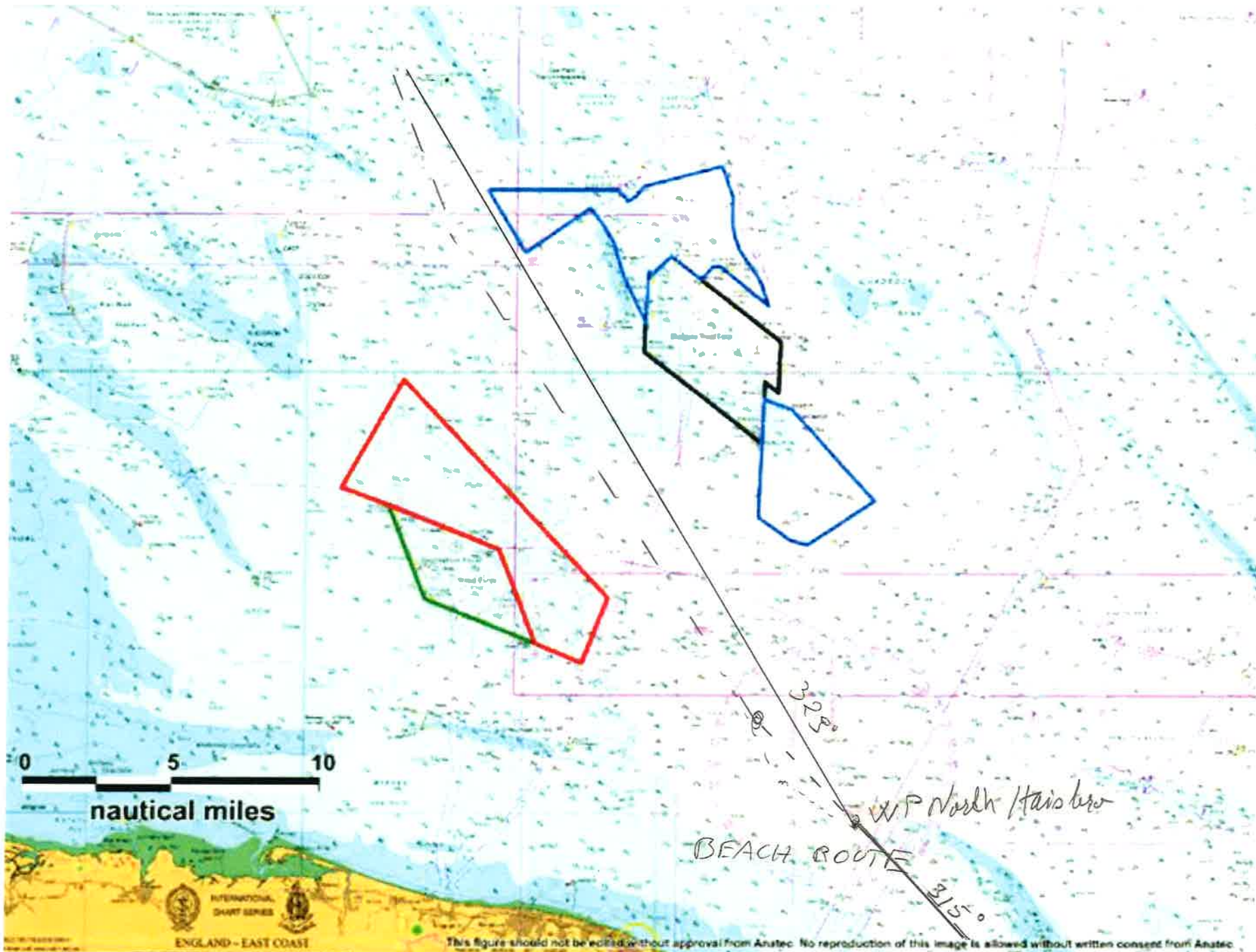
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0 5 10
nautical miles

WP North Haisboro
BEACH ROUTE
315°

INTERNATIONAL CHART SERIES
ENGLAND - EAST COAST

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1 Meeting Overview

A call was held on the 9th July 2021 to discuss the Dudgeon and Sheringham Shoal Offshore Wind Farm Extensions Project with P&O. Participants of the call are listed in Table 1.1.

Table 1.1 Call Participants

Person	Organisation
Grant Laversuch (GL)	P&O
Philip van Wijnen (PW)	P&O
Sarah Chandler (SC)	Equinor
Erwin Oosterhoff (EO)	Equinor
Sam Westwood (SW)	Anatec
Adam Foster (AF)	Anatec

2 Minutes

2.1 Overview

- Introductions were given by all.
- SC provided a project update, and summarised the upcoming Development Consent Order (DCO) process. The project is currently in the pre-application phase and has recently completed statutory consultation including publication of the Preliminary Environmental Information Report (PEIR). Ongoing engagement is being undertaken where necessary in support of the preparation of the final Environmental Statement (ES).
- SW noted the key part of the ES from a shipping and navigation perspective is the Navigation Risk Assessment (NRA). SW explained the purpose of meeting with P&O was to ensure relevant inputs and assumptions within the NRA were appropriate and agreed.

2.2 Baseline Data

- SW presented baseline data of P&O ferries that will be considered within the NRA – a year of AIS data from 2019 (noting that 2020 data has not been relied upon due to potential reductions in vessel movements during the Covid-19 pandemic restrictions). The data has been used to define pre wind farm routing and percentiles. PW and GL were content with the AIS data and routing noting that:

- The Pride of York and Pride of Bruges have been sold since 2019, however chartered vessels are being used on the same routes, and Mean Route Positions and schedules have not changed;
 - There have been no transit reductions on any routes (including those associated with Teesside) since 2019;
 - There is an additional route to the west of the existing Sheringham Shoal and proposed extension not shown which is used in certain tidal / weather conditions however this route is unaffected by the projects.
- SW queried if any increases in P&O traffic in the area was expected. PW stated some increase was likely, but that the 2019/2020 data provided good baseline indication.

2.3 Potential Operational Risks

- SW presented the deviations that were being considered within the NRA for the identified routeing, and a figure showing the available sea room between the proposed extension projects.
- SW noted P&O stated deviations would be “manageable” within the response to the regular operator outreach, and queried if the deviations and sea room shown were considered acceptable by P&O. GL stated there were no navigational safety concerns, and noted P&O vessels safely navigate in more restricted areas than would be the case here. GL explained key area of concern is around the potential for additional journey distances over the life of the wind farm leading to increased cost to P&O.
- GL noted related concern over “indirect” impacts from the projects, in particular from deviations taken to avoid wind farm traffic. SW queried whether this was in relation to areas in and around port, or at the wind farm sites themselves, and GL stated it was both.
 - EO queried whether there had been any issues associated with the existing Dudgeon and Sheringham Shoal projects. Neither GL or PW were aware of any incidents / near misses from a navigational safety perspective. They noted that their concern was that P&O vessels often have to deviate (collision avoidance in compliance with COLREGS) around support vessels creating a commercial concern.
- GL noted due to effective promulgation of information and duration of effects, there was limited concern over wind farm traffic during the construction phase. Primary concern was in relation to the operational phase, as typical construction phase mitigations may no longer be applicable, and impacts would be present for a much longer period of time.
- SW queried any suggested mitigations that the project could consider in relation to P&O concerns.
 - PW stated consideration of shipping routes during the site design process could help with deviations and the commercial impacts. SC noted that all input with regard to site design would be considered, however this process would be influenced by various constraints, and that a “Rochdale Envelope” approach is being taken whereby a worst case is carried through the assessment process.

- SC queried any suggested secondary mitigations that the project could consider?
 - PW suggested procedures / commitments in relation to project vessel routing would be beneficial in terms of limiting a need to deviate. In particular, consideration of crossing angles with existing shipping routes. Noting COLREGS compliance, specified routing for wind farm vessels would limit the need for P&O vessels to deviate.
 - GL noted a general industry trend towards cleaner / greener energy sources whilst vessels were in port, and suggested scope for synergy between the renewables industry and vessel operators in this regard.

2.4 AOB

- PW queried whether other operators were being consulted with (e.g., DFDS, Cobelfret and Stena). SW confirmed these organisations were included in the regular operators outreach and that additional engagement was being undertaken where appropriate including with the Chamber of Shipping. Hazard Workshop invites will also be issued to relevant operators. **Action: AF to issue Hazard Workshop details to P&O.**
- SW stated minutes would be distributed for comment. **Action: minutes to be circulated.**