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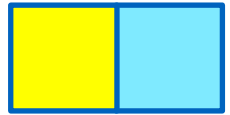
# **East Anglia ONE North and East Anglia TWO Offshore Windfarms**

## **Project Update Note**

Applicants: East Anglia ONE North Limited and East Anglia TWO Limited  
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**Applicable to East Anglia ONE North and East Anglia TWO**



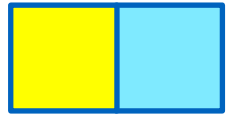
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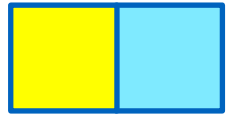
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## Glossary of Acronyms

DCO	Development Consent Order
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## Glossary of Terminology

Applicants	East Anglia TWO Limited / East Anglia ONE North Limited
Construction consolidation sites	Compounds associated with the onshore works which may include elements such as hard standings, lay down and storage areas for construction materials and equipment, areas for vehicular parking, welfare facilities, wheel washing facilities, workshop facilities and temporary fencing or other means of enclosure.
Development area	The area comprising the onshore development area and the offshore development area (described as the 'order limits' within the Development Consent Order).
East Anglia ONE North project	The proposed project consisting of up to 67 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
East Anglia TWO project	The proposed project consisting of up to 75 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
Horizontal directional drilling (HDD)	A method of cable installation where the cable is drilled beneath a feature without the need for trenching.
Jointing bay	Underground structures constructed at intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts.
Landfall	The area (from Mean Low Water Springs) where the offshore export cables would make contact with land, and connect to the onshore cables.
National electricity grid	The high voltage electricity transmission network in England and Wales owned and maintained by National Grid Electricity Transmission plc
National Grid infrastructure	A National Grid substation, cable sealing end compounds, cable sealing end (with circuit breaker) compound, underground cabling and National Grid overhead line realignment works to facilitate connection to the national electricity grid, all of which will be consented as part of the proposed East Anglia TWO / East Anglia ONE North project Development Consent Order but will be National Grid owned assets.
National Grid substation	The substation (including all of the electrical equipment within it) necessary to connect the electricity generated by the proposed East Anglia TWO / East Anglia ONE North project to the national electricity grid which will be owned by National Grid but is being consented as part of the proposed East Anglia TWO / East Anglia ONE North project Development Consent Order.
National Grid substation location	The proposed location of the National Grid substation.
Onshore cable corridor	The corridor within which the onshore cable route will be located.



Onshore cable route	This is the construction swathe within the onshore cable corridor which would contain onshore cables as well as temporary ground required for construction which includes cable trenches, haul road and spoil storage areas.
Onshore cables	The cables which would bring electricity from landfall to the onshore substation. The onshore cable is comprised of up to six power cables (which may be laid directly within a trench, or laid in cable ducts or protective covers), up to two fibre optic cables and up to two distributed temperature sensing cables.
Onshore development area	The area in which the landfall, onshore cable corridor, onshore substation, landscaping and ecological mitigation areas, temporary construction facilities (such as access roads and construction consolidation sites), and the National Grid Infrastructure will be located.
Onshore infrastructure	The combined name for all of the onshore infrastructure associated with the proposed East Anglia TWO / East Anglia ONE North project from landfall to the connection to the national electricity grid.
Onshore substation	The East Anglia TWO / East Anglia ONE North substation and all of the electrical equipment within the onshore substation and connecting to the National Grid infrastructure.
Onshore substation location	The proposed location of the onshore substation for the proposed East Anglia TWO / East Anglia ONE North project.
Transition bay	Underground structures at the landfall that house the joints between the offshore export cables and the onshore cables.



# 1 Project Update Note

1. This document is applicable to both the East Anglia ONE North and East Anglia TWO applications, and therefore is endorsed with the yellow and blue icon used to identify materially identical documentation in accordance with the Examining Authority's procedural decisions on document management of 23<sup>rd</sup> December 2019. Whilst for completeness of the record this document has been submitted to both Examinations, if it is read for one project submission there is no need to read it again for the other project.

## 1.1 OFH2 Action 1: Potential for Shared Cable Infrastructure

2. Following Open Floor Hearing 2 held on 8 October 2020, the Examining Authority in the Action Points from Open Floor Hearings 1, 2 and 3 (EV-016) issued the following action for the Applicants:

*“Several speakers at [OFH2] made reference to East Anglia ONE and East Anglia THREE having prepared shared cable ducting and so having reduced construction impact overall. Please confirm the approach that was taken and address the extent to which it would be possible to take the same approach for these applications, should they be constructed sequentially.”*

3. At Deadline 1, the Applicants responded on this action in the **Applicants' Responses to Hearings Action Points** (REP1-050), setting out the approach taken by East Anglia ONE Limited (developer of the East Anglia ONE project), which installed cable ducting for the future East Anglia THREE project while installing the ducting and cabling for East Anglia ONE. This was a requirement of the East Anglia ONE Development Consent Order (DCO).
4. The Applicants also responded at Deadline 1 stating that the possibility of installing ducts for both Projects in parallel should the Projects be built sequentially was being investigated by the Applicants and an update would be provided at Deadline 2.
5. The Applicants can now confirm that should both the East Anglia ONE North project and the East Anglia TWO project be consented and then built sequentially, when the first project goes into construction, the ducting for the second project will be installed along the whole of the onshore cable route in parallel with the installation of the onshore cables for the first project. This will include installing ducting using a trenchless technique at the landfall for both Projects at the same time.
6. When the second project then moves into the construction phase, temporary infrastructure such as haul roads would be installed (where required) to access



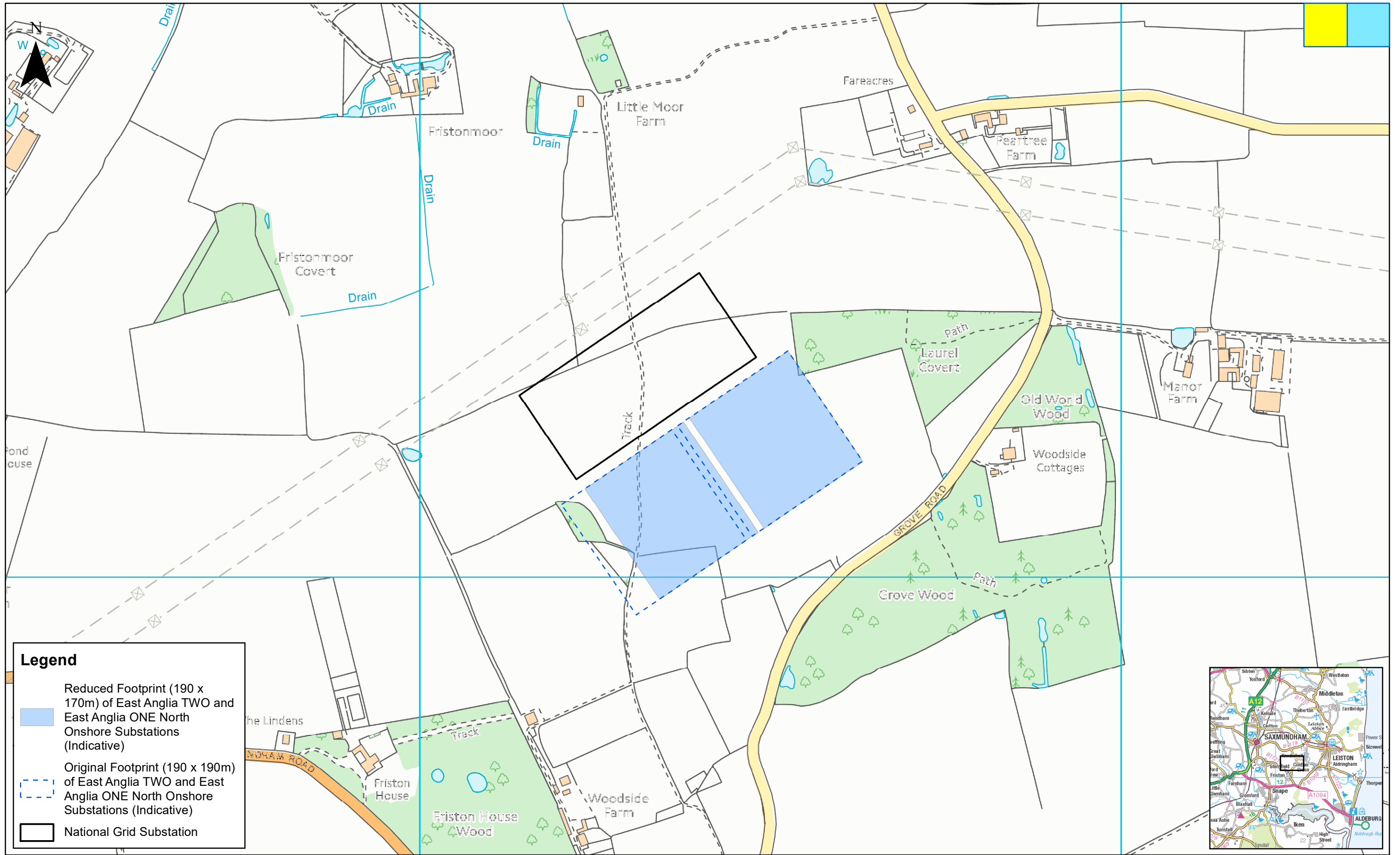
the works; duct integrity testing and repair would be undertaken (where required); new joint bays will be constructed along the cable route; surface water management arrangements would be established; and the pulling of electrical cables through the pre-installed cable ducts would be undertaken. Jointing of the electrical cables, backfilling of jointing bays and reinstatement would then follow.

7. By making this commitment, there will no longer be a scenario whereby both Projects are constructed completely independent of each other along the onshore cable route.

## 1.2 Onshore Substation Footprint Reduction

8. **Table 6.27** of **Chapter 6 – Project Description** (APP-054) outlines the key design parameters for the onshore substations upon which the Applications have been based. This included the maximum footprint of each onshore substation of 190m x 190m, which represented the reasonable worst case design basis at the time of the Applications.
9. Since submission of the Applications, the Applicants have undertaken extensive engagement with the supply chain regarding the design of the onshore substations and as a result the Applicants can confirm a reduction in the maximum footprint of each onshore substation to 190m x 170m. This represents an approximate 10% reduction in the development footprint of each onshore substation. **Figure 1** compares the original and reduced footprint and position of the onshore substations.
10. This has facilitated the micrositing of the onshore substations to optimise their positioning relative to the surrounding environment and allows for the retention of an established woodland area (of around 2,700m<sup>2</sup> in area) to the west of the onshore substations and the partial retention of an adjoining area of established hedgerows and scrub which would otherwise have been removed. In doing so, additional visual screening of the onshore substations and National Grid substation is achieved from the outset. In addition, the onshore substations will be located slightly further from receptors to the west and south west, including the village of Friston
11. The Applicants will update the boundary of Work No. 30 to reflect the onshore substation footprint reduction at Deadline 3.





**Legend**

- Reduced Footprint (190 x 170m) of East Anglia TWO and East Anglia ONE North Onshore Substations (Indicative)
- Original Footprint (190 x 190m) of East Anglia TWO and East Anglia ONE North Onshore Substations (Indicative)
- National Grid Substation



Rev	Date	By	Comment
1	16/11/2020	FC	First Issue.

1:5,000  
Scale @ A3

0 100 200 Metres

Prepared: AB  
Checked: BD  
Approved: FM

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**East Anglia ONE North and East Anglia TWO**  
Reduced Footprint of Onshore Substations

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Rev	1
Date	16/11/20
Figure	1
Coordinate System:	BNG
Datum:	OSGB36