

# Norfolk Vanguard Offshore Wind Farm Outline Travel Plan

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*Photo: Kentish Flats Offshore Wind Farm*

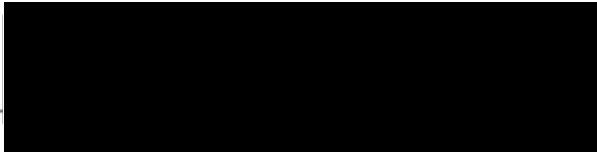


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For and on behalf of Norfolk Vanguard Limited

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Date: 8<sup>th</sup> June 2018

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## Glossary

CIHT	Chartered Institution of Highways and Transportation
DCO	Development Consent Order
EIA	Environmental Impact Assessment
ES	Environmental Statement
FTP	Final Travel Plan
HGV	Heavy Goods Vehicle
HDPE	High Density Polyethylene
LTP	Local Transport Plan
MA	Mobilisation Area
NCC	Norfolk County Council
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Projects
OTMP	Outline Traffic Management Plan
OTP	Outline Travel Plan
PEIR	Preliminary Environmental Information Report
SoS	Secretary of State
TPC	Travel Plan Coordinator
WCS	Worst Case Scenario

## Terminology

Cable Relay Station	Primarily comprised of an outdoor compound containing reactors (also called inductors, or coils) and switchgear to increase the power transfer capability of the cables under the HVAC technology scenario as considered in the PEIR. This is no longer required for the project as the HVDC technology has been selected.
Control Point	A location that provides the checks and controls for the movement of HGVs and employees.
Delivery	A delivery is the process of transporting goods from a source location to a predefined destination. A delivery will generate two vehicle movements (an arrival and departure)
Joining pit	Underground structures constructed at regular intervals along the cable route to join sections of cable and facilitate installation of the cables into the buried ducts.
Landfall	Where the offshore cables come ashore at Happisburgh South
Landfall compound	Compound at landfall within which HDD drilling would take place
Link boxes	Underground chambers or above ground cabinets next to the cable trench housing low voltage electrical earthing links.
Mobilisation area	Areas approximately 100 x 100m used as access points to the running track for duct installation. Required to store equipment and provide welfare facilities. Located adjacent to the onshore cable route, accessible from local highways network and suitable for the delivery of heavy and oversized materials and equipment.
National Grid new / replacement overhead line tower	New overhead line towers to be installed at the Necton National Grid substation.
National Grid overhead line modifications	The works to be undertaken to complete the necessary modification to the existing 400kV overhead lines

National Grid substation extension	The permanent footprint of the National Grid substation extension
National Grid temporary works area	Land adjacent to the Necton National Grid substation which would be temporarily required during construction of the National Grid substation extension.
Necton National Grid substation	The existing 400kV substation at Necton, which will be the grid connection location for Norfolk Vanguard
Onshore 400kV cable route	Buried high-voltage cables linking the onshore project substation to the Necton National Grid substation
Onshore cable route	The 45m easement which will contain the buried export cables as well as the temporary running track, topsoil storage and excavated material during construction.
Onshore cables	The cables which take the electricity from landfall to the onshore project substation.
Onshore infrastructure	The combined name for all onshore infrastructure associated with the project from landfall to grid connection.
Onshore project area	All onshore electrical infrastructure (landfall; onshore cable route, accesses, trenchless crossing technique (e.g. Horizontal Directional Drilling (HDD)) zones and mobilisation areas; onshore project substation and extension to the Necton National Grid substation and overhead line modification)
Onshore project substation	A compound containing electrical equipment to enable connection to the National Grid. The substation will convert the exported power from HVDC to HVAC, to 400kV (grid voltage). This also contains equipment to help maintain stable grid voltage.
Running track	The track along the onshore cable route which the construction traffic would use to access workfronts.
The Applicant	Norfolk Vanguard Limited
The project	Norfolk Vanguard Offshore Wind Farm, including the onshore and offshore infrastructure.
Transition pit	Underground structures that house the joints between the offshore export cables and the onshore cables.
Trenchless crossing zone (e.g. HDD)	Temporary areas required for trenchless crossing works.
Vehicle movement	A single trip (i.e. either an arrival to, or departure from site) for the transfer of employees or goods.
Workfront	The 150m length of onshore cable route within which duct installation would occur

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## 1 OUTLINE TRAVEL PLAN

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### 1.1 Introduction

1. This document forms part of the Development Consent Order (DCO) application for the onshore project area for the Norfolk Vanguard Offshore Wind Farm (herein ‘the project’).
2. A traffic and transport impact assessment has been undertaken for the project and is detailed in Chapter 24 Traffic and Transport of the Environmental Statement (ES).
3. In respect of traffic and transport, the certified plans referred to in the draft DCO are outlined below:
  - Outline Traffic Management Plan (OTMP) (document reference 8.8): The OTMP sets out the standards and procedures for managing the impact of Heavy Goods Vehicle (HGV) traffic during the onshore construction period, including localised road improvements necessary to facilitate the safe use of the existing road network;
  - Outline Travel Plan (OTP) (document reference 8.9): The OTP sets out how onshore construction employee traffic would be managed and controlled; and
  - Outline Access Management Plan (OAMP) (document reference 8.10): The OAMP sets out detail on the location, frontage, general layout, visibility and embedded mitigation measures for access for the onshore project substation, landfall and points of access to the onshore cable route. It presents the requirements and standards that will be incorporated into the final access design.
4. Final plans which accord with these outline documents must be submitted to and approved by the relevant local planning authority (in consultation with Norfolk County Council and Highways England) prior to commencement of any relevant works, as per Requirements 21 and 22 of the draft DCO.

#### 1.1.1 Purpose of OTP

5. In accordance with Requirement 21 of the draft DCO, this OTP sets out a comprehensive strategy for encouraging more sustainable methods of travel for construction employees, and promoting travel alternatives to single occupancy car trips during the construction phase of the project.
6. This OTP has been given the status of ‘Outline’ recognising that 2020 is the earliest realistic date for commencement of pre-construction works for the project, by which time the key assumptions and estimations that have informed the ES (e.g. workforce origins) will have been substantiated and refined by the appointed contractor.

7. The OTP strategy defines the controls to ensure the project is within the bounds of the employee generated traffic impacts assessed in Chapter 24 Traffic and Transport of the ES.
8. The purpose of this OTP is to limit employee traffic movements associated with the project and reduce traffic impact on local communities and commuters in Norfolk.
9. The specific objectives of this OTP are to:
  - Minimise, where practicable, the level of vehicular trip making associated with construction staff movements to and from the mobilisation areas (Mas);
  - Provide a framework of measures that promote sustainable travel to be developed in detail by the appointed contractor; and
  - Outline the protocols and processes for the ongoing management of the Travel Plan (TP).
10. Norfolk Vanguard Limited would require defined performance standards to be observed as part of the contractor's obligations to comply with and observe the Requirements of the DCO.
11. The OTP presents an outline of measures that could be employed to meet these targets but does not seek to be too prescriptive, so as to ensure that innovation by the contractor in bringing forward the final TP is not constrained.
12. Norfolk Vanguard Limited will work with the relevant local authorities to ensure that the provisions set out in the OTP are adhered to.

### 1.1.2 OTP Exclusions

13. The OTMP covers onshore construction activities only.
14. The pre-construction stage of the project represents minor activities (e.g. access construction) with limited demand for employees and therefore is not subject to the OTP.
15. There is limited operational traffic associated with the project and, as such, it has been agreed with stakeholders that the Travel Plan does not need to cover the operational period of the project.

## 1.2 Context of the Travel Plan

16. From a Transport Planning perspective, the onshore project area requires a specialist workforce, likely to be widely disbursed and travelling to remote locations. Without intervention, the construction workforce would have the propensity to use private cars to travel to site and many of those journeys would be single occupancy. This in

turn could lead to significant environmental impacts on the local highway network and the surrounding communities in the vicinity of the onshore cable route.

17. The key features of the OTP strategy are:
  - Intercepting employees at journey origin, with proposed crew vans or car share schemes; and
  - The provision of site transfer vehicles for onward transfer between MAs and onshore cable route sections.
18. In contrast to a more typical workplace OTP, construction employees would be in a contractually controlled environment, ensuring that monitoring and enforcement regimes are more readily accepted.

### 1.3 Project Description

19. A comprehensive project description of the onshore project area is contained within Chapter 5 Project Description of the ES.
20. The onshore cable route is approximately 60km in length and travels west from landfall at Happisburgh South towards the northern edge of North Walsham before bearing southwest to the onshore project substation at Necton. The project study area is shown in Figure 1.
21. The onshore project substation at Necton will be constructed approximately 1km away from the existing Necton National Grid 400kV substation.
22. The onshore cable route comprises trenches (within which ducts would be pulled to house the cable circuits), a running track to deliver equipment to the installation site from Mobilisation Areas (MA) and separate storage areas for topsoil and subsoil.
23. The main installation method would be through the use of open cut trenching. High Density Polyethylene (HDPE) ducts would be installed within the trenches and the soil backfilled. Cables would then be pulled through the pre-laid ducts at a later stage in the construction programme.

### 1.4 Construction Programme and Employee Demand

24. Table 1.1 details the indicative onshore project construction programme. It can be noted that a sequential approach has been adopted for construction stages with the duct installation/primary works period representing the maximum construction intensity period in terms of employee demand. It is forecast that the workforce would peak at 480 employees.

Table 1.1 Indicative Onshore Project Construction Programme

Activity	Year					
	2020	2021	2022	2023	2024	2025
<b>Landfall</b>						
Duct Installation						
Cable Pull, Joint and Commission						
<i>Phase 1</i>						
<i>Phase 2</i>						
<b>Onshore cable corridor</b>						
Preconstruction works						
Duct installation works						
Cable pull, joint and commission						
<i>Phase 1</i>						
<i>Phase 2</i>						
<b>Onshore project substation</b>						
Preconstruction works						
Primary works						
Electrical plant installation and commission						
<i>Phase 1</i>						
<i>Phase 2</i>						

25. With regards to the cable pull and joint stage, it is estimated that a total of 16 work gangs will construct 96 joint pits over 16 equidistant onshore cable route sections. Peak employee demand for this stage is estimated at 260 employees.
26. The details of peak employee traffic demand summarised in Table 1.2.

Table 1.2 Employee Summary

Infrastructure component	ES assessed employees	Notes
<b><i>Duct Installation and Primary Works</i></b>		
Pre-construction	N/A	Negligible demand anticipated.
Duct installation	400	
Landfall	50	
Trenchless crossings	30	3 gangs of 10 employees each.
<b>Total</b>	<b>480</b>	
<b><i>Cable Pull, Joint and Commission</i></b>		
Cable pulling	160	

Infrastructure component	ES assessed employees	Notes
<b>Onshore project substation</b>	50	
<b>National Grid substation Extension</b>	50	
<b>Total</b>	260	

27. The nature of construction works typically requires that employees work longer hours in the summer and shorter hours in the winter to take advantage of the available daylight. It is envisaged that construction employees would work a single shift up to 12hours (7am to 7pm) during summer and shorter shifts in the winter.
28. A typical five-day working week would be employed, potentially extending to a seven-day working week during accelerated periods of installation due to miscellaneous reasons such as poor weather.

## 1.5 Policy and Guidance Framework

29. The following sections provide detail on key documents which are relevant to employee travel planning for the project.

### 1.5.1 National Policy

30. The assessment of potential traffic and transport impacts has been made with specific reference to the National Policy Statements (NPS). The NPS set out policies or circumstances that the UK Government consider should be taken into account when making decisions on Nationally Significant Infrastructure Projects (NSIP).
31. With specific regard to Travel Plans, the Overarching NPS for Energy (EN-1) (DECC 2011a) is applicable and is summarised in Table 1.3.

**Table 1.3 NPS EN-1 Requirements**

NPS requirement	NPS reference
Where appropriate, the applicant should prepare a Travel Plan including demand management measures to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by public transport, walking and cycling, to reduce the need for car parking associated with the proposal and to mitigate transport impacts.	Section 5.13.4

### 1.5.2 Local Policy

32. The traffic and transport study area falls under the jurisdiction of Norfolk County Council and Suffolk County Council, and would include the following local planning authorities:

- North Norfolk District Council;
- South Norfolk District Council;
- Breckland Council;
- Broadland District Council;
- Waveney District Council; and
- Norwich City Council.

33. Table 1.4 provides details of the local planning policy documents and the relevant policies.

**Table 1.4 Relevant Local Planning Policies**

Document	Policy/guidance	Policy/guidance purpose
North Norfolk District Council		
Local Development Framework – Core Strategy adopted September 2008.	CT5: The Transport Impact of New Development	Development will be designed to reduce the need to travel and to maximise the use of sustainable forms of transport appropriate to its particular location. Development proposals will be considered against the following criteria; <ul style="list-style-type: none"> <li>• If the proposal would have significant transport implications, it is accompanied by a transport assessment, the coverage and detail of which reflects the scale of development and the extent of the transport implications, and also, for non-residential schemes, a travel plan.</li> </ul>
South Norfolk District Council		
Development Management Development Plan <b>Document. (South Norfolk District Council, 2015)</b>	Policy DM 3.11 Road Safety and the Free Flow of Traffic	On all sites development will not be permitted that endangers highway safety or the satisfactory functioning of the highway network. Planning permission will be granted for development involving the formation or intensified use of a direct access onto a Corridor of Movement providing it would not: <ul style="list-style-type: none"> <li>• Prejudice the safe and free flow of traffic or planned proposals for sustainable transport initiatives along the Corridor of Movement;</li> </ul>
Joint Core Strategy (Broadland, Norwich and South Norfolk) adopted January 2014.	Policy 6: Access and Transportation.	The Transportation system will be enhanced to develop the role of Norwich as a Regional Transport Node. This will be achieved by a number of factors including; <ul style="list-style-type: none"> <li>• Continuing to recognise that in the most rural areas the private car will remain an important means of travel.</li> </ul>
Breckland Council		
Breckland Local	Policy CP13:	Travel Plans should be submitted for major schemes or those schemes

Document	Policy/guidance	Policy/guidance purpose
Plan - Core Strategy and Development Control Policies Development Plan Document adopted December 2009	Accessibility	where there are significant transport implications, such as those where a Transport Assessment is required.
Emerging Single Local Plan Pre-Submission Publication August 2017	Policy TR01: Sustainable Transport Network	Major development proposals should include an assessment of the impacts of new development on the existing transport network. Where potential transport impacts are identified, developers will be expected to produce Transport Assessments to assess the impacts and identify appropriate mitigation, together with Travel Plans where appropriate.
<b>Broadland District Council</b>		
Joint Core Strategy (Broadland, Norwich and South Norfolk) adopted January 2014.	Policy 6: Access and Transportation.	The Transportation system will be enhanced to develop the role of Norwich as a Regional Transport Node. This will be achieved by a number of factors including; <ul style="list-style-type: none"> <li>Continuing to recognise that in the most rural areas the private car will remain an important means of travel.</li> </ul>
Development Management Development Plan Document. (Broadland District Council, 2015)	Policy TS2 – Travel Plans and Transport Assessments	In the case of major development, or where a particular need is identified, a Transport Assessment and/or Travel Plan will be required. Developers will need to include proposals to deal with any consequences of their development in terms of maximising access by foot, cycle and public transport and the means by which this will be secured in perpetuity.
<b>Waveney District Council</b>		
Waveney Local Plan - Core Strategy Development Plan Document adopted January 2009	Policy CS15: Sustainable Transport	Development proposals that will have significant transport implications will need to be accompanied by a transport assessment and travel plan showing how car based travel to the site can be minimised.
<b>Norwich City Council</b>		
Joint Core Strategy (Broadland, Norwich and South Norfolk) adopted January 2014.	Policy 6: Access and Transportation.	The Transportation system will be enhanced to develop the role of Norwich as a Regional Transport Node. This will be achieved by a number of factors including; <ul style="list-style-type: none"> <li>Continuing to recognise that in the most rural areas the private car will remain an important means of travel.</li> </ul>

## 1.6 Local Transport Context

### 1.6.1 Introduction

34. This section examines the forecast employee demographic (informed by the socio-economic study contained in ES Chapter 31 Socio-economics) and evaluates the travel options available for access to the cable route.

### 1.6.2 Employee Distribution

35. The types of specialist skills required for the project means that construction employees often have to be drawn from across the country since contractors are unable to rely wholly on local labour sources. Socio economic data has informed a worst case forecasts that 30% of the workforce would be drawn from the local area (resident) and 70% would be drawn from beyond a daily commute (in-migrant).
36. Figures 2 and 3 show the resulting workforce origin for local and in-migrant employees respectively.

### 1.6.3 Existing Sustainable Travel Options

37. The Chartered Institution of Highways and Transportation (CIHT) (2000) document entitled 'Guidelines for Providing for Journeys on Foot', considers 2km as a 'preferred maximum' distance for commuting on foot.
38. By this benchmark, it is envisaged that negligible numbers of employees would consider walking as a primary mode of commuting to the sites. The CIHT (1996) guidance 'Cycle Friendly Infrastructure, Guidelines for Planning and Design' states that three quarters of journeys by all modes are less than five miles (8km) and that this distance can be cycled comfortably by a fit person. It is concluded therefore that 8km represents a maximum realistic range for commuting by bike.
39. Although an 8km distance means a few settlements are within cycling distance of the MAs, the lack of safe routes and nature/duration of the work suggests that cycling is unlikely to be a feasible mode choice for most construction staff.
40. The MAs are located in remote rural areas, the distance of the nearest bus stop or railway station from an MA, as well as the service frequency and hours of operation are considered to be a significant deterrent in the choice of public transport by construction employees.
41. The evaluation of sustainable transport options demonstrates that there is a low level of accessibility to the MAs by a large proportion of the local workforce. This is unsurprising as the cable route is established away from built up areas which would typically benefit from higher levels of accessibility.



42. Recognising that sustainable modes of transport will have a limited share of workforce travel, the OTP strategy seeks to achieve sustainable transport use primarily through private transport solutions that encourage multi-occupancy vehicle travel.
43. The OTP places a focus on a controlled environment in which employees are not discouraged from travelling via walking, cycling or public transport but would be actively encouraged to make best use of the multi-occupancy vehicle measures in place.

## 1.7 Preliminary Targets

44. Chapter 24 Traffic and Transport of the ES contained an assessment of the forecast level of traffic that would be generated during peak construction, assuming workforce single occupancy vehicles as a Worst Case Scenario (WCS).
45. For the OTP, specific targets relating to workforce trip rates or mode share have not been proposed as it is considered that the contractor will better inform this evaluation. For example, the split of local to in-migrant employees will have a significant impact on the effective travel planning measures that can be put in place and this will only become known post consent.
46. It is proposed that workforce demographics would be validated by the contractor, to enable targets to be established and set out in a final TP. In the interim, the OTP establishes a framework of measures to be adopted, supported by robust monitoring, enforcement and governance.

## 1.8 Travel Plan Measures

### 1.8.1 Introduction

47. This OTP comprises a framework of a number of initiatives and measures to seek to reduce travel by single occupancy vehicle and to develop awareness of travel choice to construction workers.
48. The contractor would optimise the application of the framework measures when establishing the workforce. A final 'feasible' package of measures would be presented in the final TP to be agreed with the relevant authorities (identified in section 1.5.2) prior to commencement on site.

### 1.8.2 Multi Occupancy Vehicle Measures

49. For larger employee 'clusters', mini-buses could be utilised; for smaller employee clusters crew vans are a more versatile alternative. These are vehicles which could potentially seat five or six people with room for tools, small materials and

equipment. The crew vans/mini-buses would pick up employees at local accommodation where a cluster of employees can be established and pre-defined pick up points.

50. Pick up points would be carefully located so as to not induce trips through the sensitive junctions identified in the ES, namely:
  - Junction 1: Junction of the A12 and Gapton Hall 'Gapton Roundabout' (Great Yarmouth);
  - Junction 2: Junction of the A47 'Vauxhall Roundabout' (Great Yarmouth);
  - Junction 3: Junction of the B1141 and A149 'Fuller's Hill Roundabout' (Great Yarmouth); and
  - Junction 7: Junction of the A47 and A1064.
51. Private car share is an option that could potentially supplement company supplied transport to maximise multi-occupancy travel. A car share database would be established to encourage the take up of car sharing by allowing employees to find other employees who may be located near to them and are interested in car sharing.
52. Those employees that expressed an interest in car sharing would be matched to car share syndicates to optimise the number of occupants in a vehicle.

### 1.8.3 Site Transfer Vehicles

53. Having reported to their designated MA, employees would be transferred to the appropriate cable section by a site transfer vehicle via the running track. These vehicles would be available throughout the day to enable transfer between cable sections and return trips to MAs and welfare facilities.

### 1.8.4 Restricted Parking/Access

54. Limited car parking spaces will be provided at each MA. Preferential spaces would be provided for company provided transport and designated car share vehicles. A permit system could also be adopted to allocate these spaces.
55. Security protocol for the MAs would require all employees and visitors to sign in and identify their mode of transport.

### 1.8.5 Supporting Measures

56. A package of supporting measures has been developed as part of this OTP to augment the multi-occupancy vehicle strategy as set out in Table 1.5.

**Table 1.5 Supporting measures**

Measures	Comments
Monitoring of overspill parking	To ensure that employees do not seek to drive direct to site the contractor will ensure that employees only park in designated bays and on-street parking close to site will be closely monitored.
Guaranteed lift home	To ensure that anyone who did not travel in their own car has the security of knowing they can return home quickly in an emergency.
Provide Travel Information Packs to employees	To be provided during the induction of a new employee. The packs would include information specific to the respective MAs such as: <ul style="list-style-type: none"> <li>• Details of private transport options and pick up points;</li> <li>• Details of bus and rail services;</li> <li>• Details and maps of local cycle and walking routes;</li> <li>• Rules for car parking; and</li> <li>• Details of car share initiatives and the 'lift home' scheme.</li> </ul>
Provide a staff notice board	The notice board would provide employees with a useful source of information regarding travel choice and include information such as details of the car share scheme, cycle routes, and private transport or bus times, as relevant to the individual MAs.
Secure cycle parking area, changing area and locked storage	To provide a safe and secure parking environment for cyclists.
Welfare and catering facilities	To avoid the need for employees to drive off site during the working day for lunch, the contractor will provide welfare facilities. These will include an area for employees to prepare and eat lunch. In addition, the contractor will also seek to encourage local suppliers (e.g. a sandwich van) to deliver food to the site compound.

## 1.9 Management Structure and Governance

### 1.9.1 Travel Plan Co-ordinator

57. A Travel Plan Co-Ordinator (TPC) would be appointed by the contractor and their contact details would be provided to the relevant local authorities prior to commencement of the construction period.
58. The TPC would be responsible for responding to any concerns raised by the relevant authorities and issues raised by local community liaison.
59. In general, the role of the TPC would involve the following:
  - Advise on the development of measures for the final TP and secure agreement from the relevant authorities;
  - Set up and maintain a filing system for all correspondence relating to the final TP;
  - Oversee the development and implementation of the final TP including the monitoring programme, reporting and any corrective measures required to

meet the targets, which will be identified through discussion with relevant local authorities;

- Oversee the necessary data collection exercises and monitoring programme and report to the relevant authorities;
- Identify potential breaches and ensure corrective procedure is followed; and
- Advise on alternative or corrective measures required to meet targets.

### 1.9.2 Local Community Liaison

60. Norfolk Vanguard Limited will ensure effective and open communication with local residents and businesses that may be affected by noise or other amenity aspects caused by the construction works. Communications will be co-ordinated on site by a designated member of the construction management team. A proactive public relations campaign will be maintained, keeping local residents informed of the type and timing of works involved, the transport routes associated with the works, the hours of likely construction traffic movements and key traffic management measures that would be provided. A combination of communication mechanisms such as posters and parish meetings will be employed to keep local residents informed.
61. A designated Norfolk Vanguard Limited local community liaison officer will to respond to any public concerns, queries or complaints in a professional and diligent manner as set out by a project community and public relations procedure which will be submitted for comment to the Local Authorities.
62. Parish Councils in the relevant area will be contacted (in writing) in advance of the proposed works and ahead of key milestones. This information will include as far as possible an indicative timetable of works, a schedule of working hours, the extent of the works, and a contact name, address and telephone number in case of complaint or query. Enquiries will be dealt with in an expedient and courteous manner. Any complaints will be logged, investigated and, where appropriate, rectifying action will be taken.
63. The above will be captured in a communications plan as part of the final CoCP (DCO Requirement 20).

### 1.10 Monitoring and Review

64. It is proposed that for the duration of the onshore construction phase, the benchmark targets set in the final TP will be monitored.
65. MA security 'sign-in logs' will provide the primary source of information as to how employees have travelled to site. In addition, feedback would be sought from the workforce during site briefings to gain an understanding of travel habits and to seek suggestions for improving the final TP.

66. The local highway network adjoining the site access points would regularly be observed by the TPC to check for evidence of overspill parking. Pick up points would also be periodically checked to ensure employees are using appropriate parking areas.
67. Notwithstanding, care needs to be exercised when developing a monitoring strategy as even the best derived car share targets could prove unwieldy to monitor and report and therefore could take the focus from the stipulated OTP objectives. It is therefore proposed that the main focus of the final TP monitoring strategy is the timely introduction of the appropriate OTP measures through the production and review of an action plan.
68. The TPC would collate monitoring data and share this with relevant stakeholders as appropriate. This would include:
  - MA employee sign-in data (in accordance with UK Data Protection Law);
  - Details of any identified breaches and corrective action; and
  - Details of complaints and follow up actions.
69. The protocol for review and discussion of these data would be agreed with the relevant local authorities during the development of the final TP.

## 1.11 Enforcement

### 1.11.1 Introduction

70. This section provides a summary of the mechanisms that would ensure that the final TP is effectively enforced.

### 1.11.2 Potential Breaches

71. To ensure that the aims of the OTP can be effectively enforced it is important to define what would constitute a breach. The following general project 'themes' have been established, and would constitute a breach whereby corrective measures would be required:
  - Construction workers driving direct to unauthorised access points; and
  - Construction workers overspill parking on the public highway.

### 1.11.3 Corrective Process

72. On receipt of a report of a potential breach the TPC would investigate the circumstances and compile a report for the relevant authorities as soon as reasonably practicable. The report would outline the outcome of the investigation and what corrective action (if necessary) had been implemented.

73. If a breach is found to be material, appropriate action will be undertaken by the TPC and relevant stakeholders notified of the course of action.
74. Individual employee breaches would be addressed through UK employment law whereby the process outlined above would form the basis for disciplinary proceedings.
75. The OTP will be a contractually binding document. Failure to follow the performance standards (including the corrective process) or continued breaches would likely be addressed by formal discussion between Norfolk Vanguard Limited and the contractor in terms of its contractual obligations.

### 1.12 Action Plan

76. Upon appointment by Norfolk Vanguard Limited, the TPC would be provided with a copy of the OTP and an Outline Action Plan which is detailed in Table 1.6. The Outline Action Plan details the broad timescales for final TP implementation. The TPC would be required to produce a detailed Action Plan in consultation with relevant stakeholders.

**Table 1.6 Action Plan**

Measures	Timescale	Responsible
<b>Pre-commencement actions</b>		
Appoint a TPC	Prior to commencement of duct installation stage	Norfolk Vanguard Limited
Finalise TP including targets, measures and action plan. Agree with relevant authorities	Prior to commencement of duct installation stage	Norfolk Vanguard Limited
Issue employees with a Travel Pack	On commencement of employment	Contractor
Ensure sufficient cycle parking and associated facilities are available at each site.	Prior to commencement of duct installation stage	Contractor
Produce a staff notice board specific to each site with useful information regarding travel choice and include information such as details of car share schemes, cycle routes, bus and train times, etc.	Prior to commencement of duct installation stage	Contractor
Implement mechanisms for providing guaranteed lift home	Prior to commencement of duct installation stage	Contractor
Establish and populate car share database with employee details. Establish car share syndicates	Prior to commencement of duct installation stage	Contractor
Establish employee clusters, company transport solutions and pick up points	Prior to commencement of duct installation stage	Contractor

On-going actions		
Issue a Travel Pack and undertake site induction for new starters	On-going during construction.	Contractor
Maintain and update the information stored in the car share database		
Monitor cycling provision		
Review company transport solutions and pick up points.		
Periodic actions		
Car park utilisation surveys at each site/employee feedback/overspill parking survey	Regular surveys during construction period.	Contractor
Produce monitoring report	On request from stakeholders	Contractor
Corrective process (investigate, report, implement action and liaise with relevant authorities)	If required	Contractor

## 1.14 References

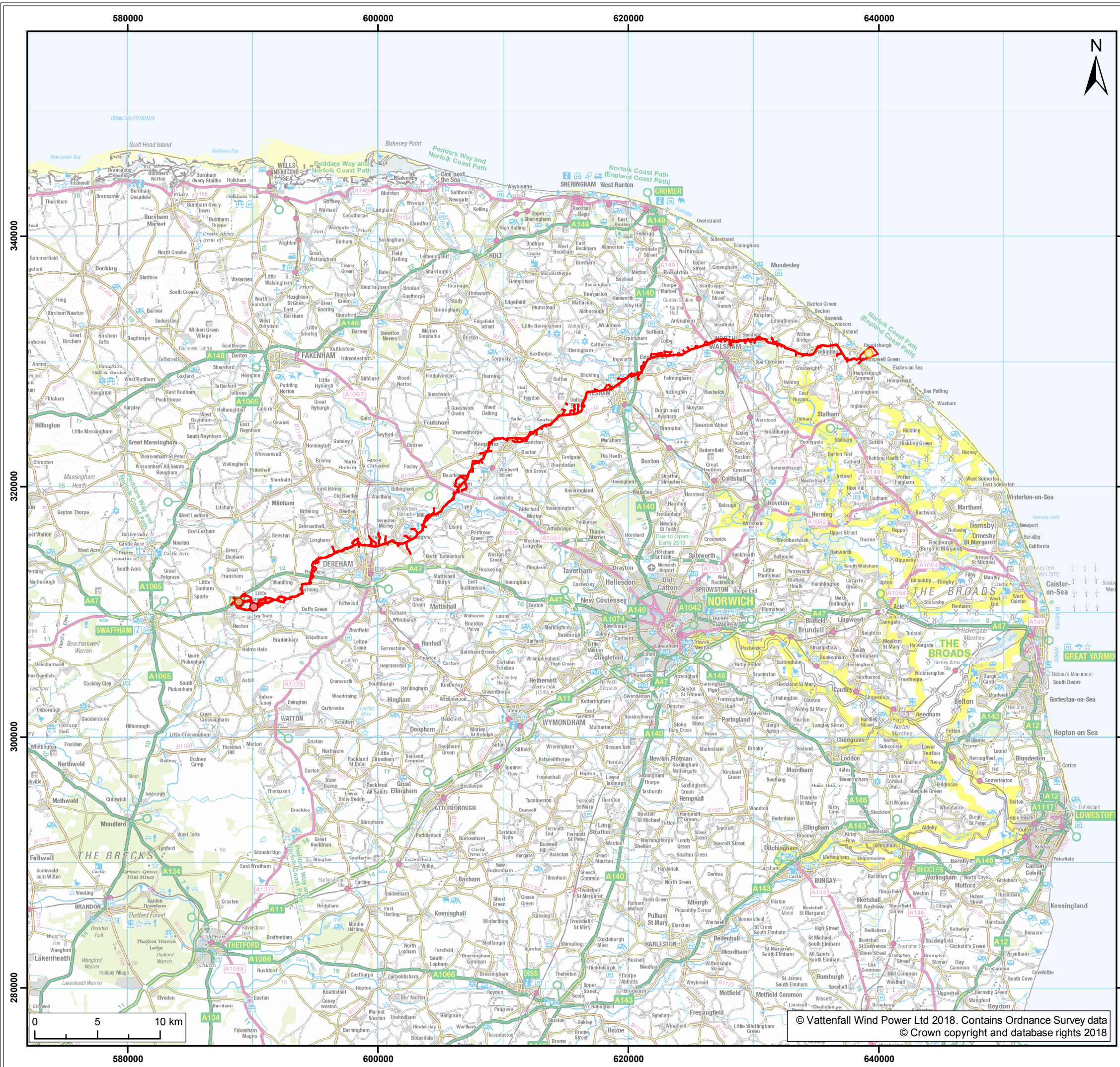
The Chartered Institution of Highways and Transportation (CIHT) (1996). Cycle-friendly Infrastructure: Guidelines for Planning and Design. 1st ed. The Institution of Highways and Transportation.

Chartered Institution of Highways and Transportation (CIHT) (2000). Guidelines for Providing for Journeys on Foot. [online] The Institution of Highways and Transportation. Available at: <http://www.ciht.org.uk/download.cfm/docid/082BEF1B-0FD2-44F4-90A0B31EB937899A> [Accessed 25 Apr. 2018].



## 1.15 Figures

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- Legend:
- Norfolk Vanguard onshore red line boundary
  - Landfall zone location
  - Onshore project substation location
  - National Grid substation extension location

Project:	Report:
Norfolk Vanguard	Outline Travel Plan

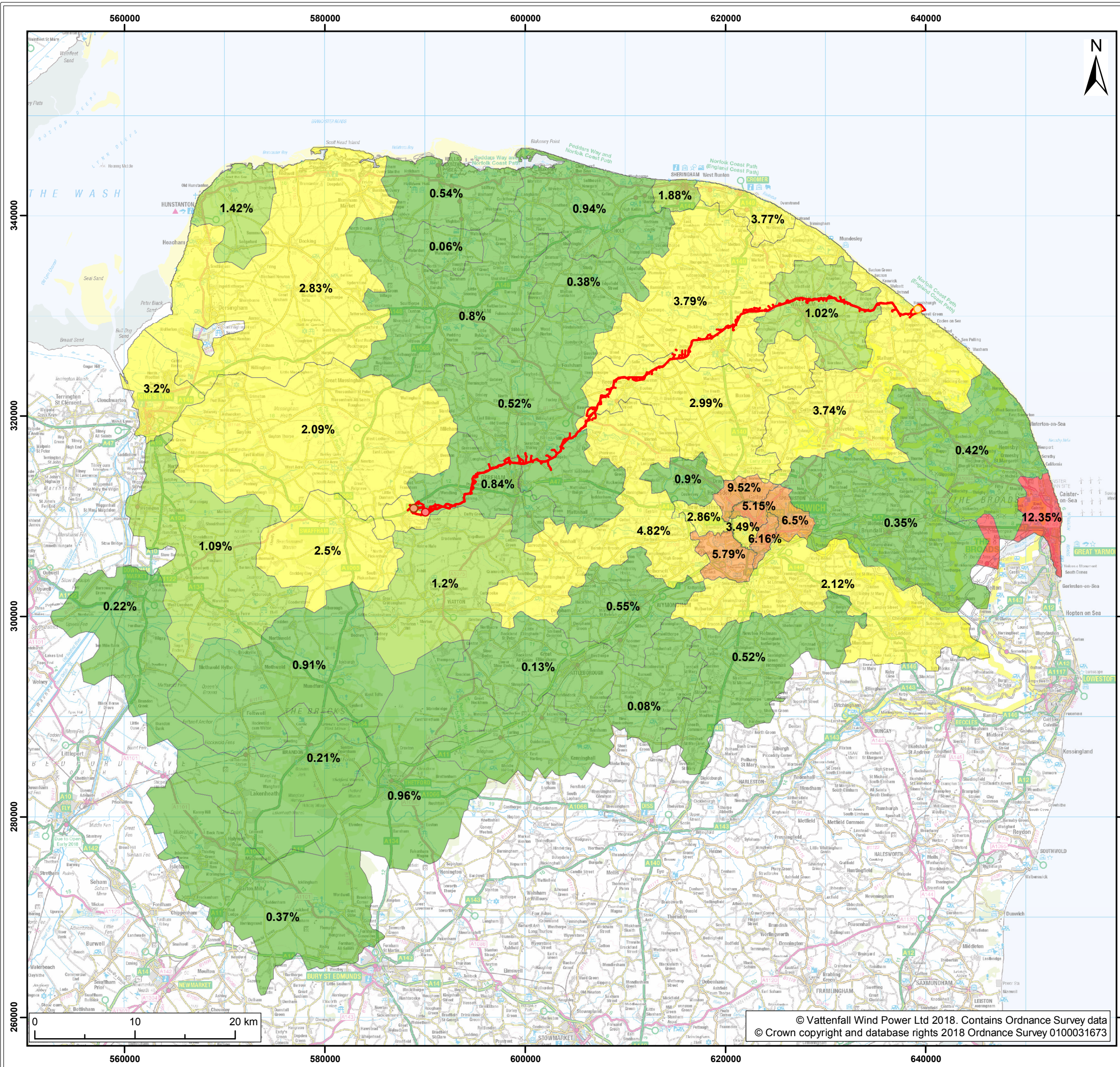
Title: Project Study Area

Figure: 1	Drawing No: PB4476-006-006-003				
Revision:	Date:	Drawn:	Checked:	Size:	Scale:
01	11/05/2018	NJ	RE	A3	1:300,000

Co-ordinate system: British National Grid EPSG: 27700



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- Legend:
- Norfolk Vanguard onshore red line boundary
  - Landfall zone location
  - Onshore project substation location
  - National Grid substation extension location
- Total bed spaces factored by journey time (%)**
- 0 - 1
  - 1-2
  - 2 - 5
  - 5 - 10
  - 10+

Project: Norfolk Vanguard  
Report: Outline Travel Plan

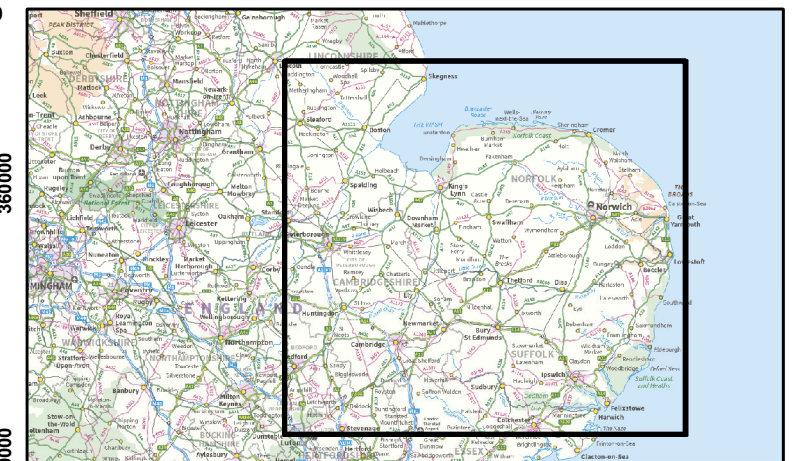
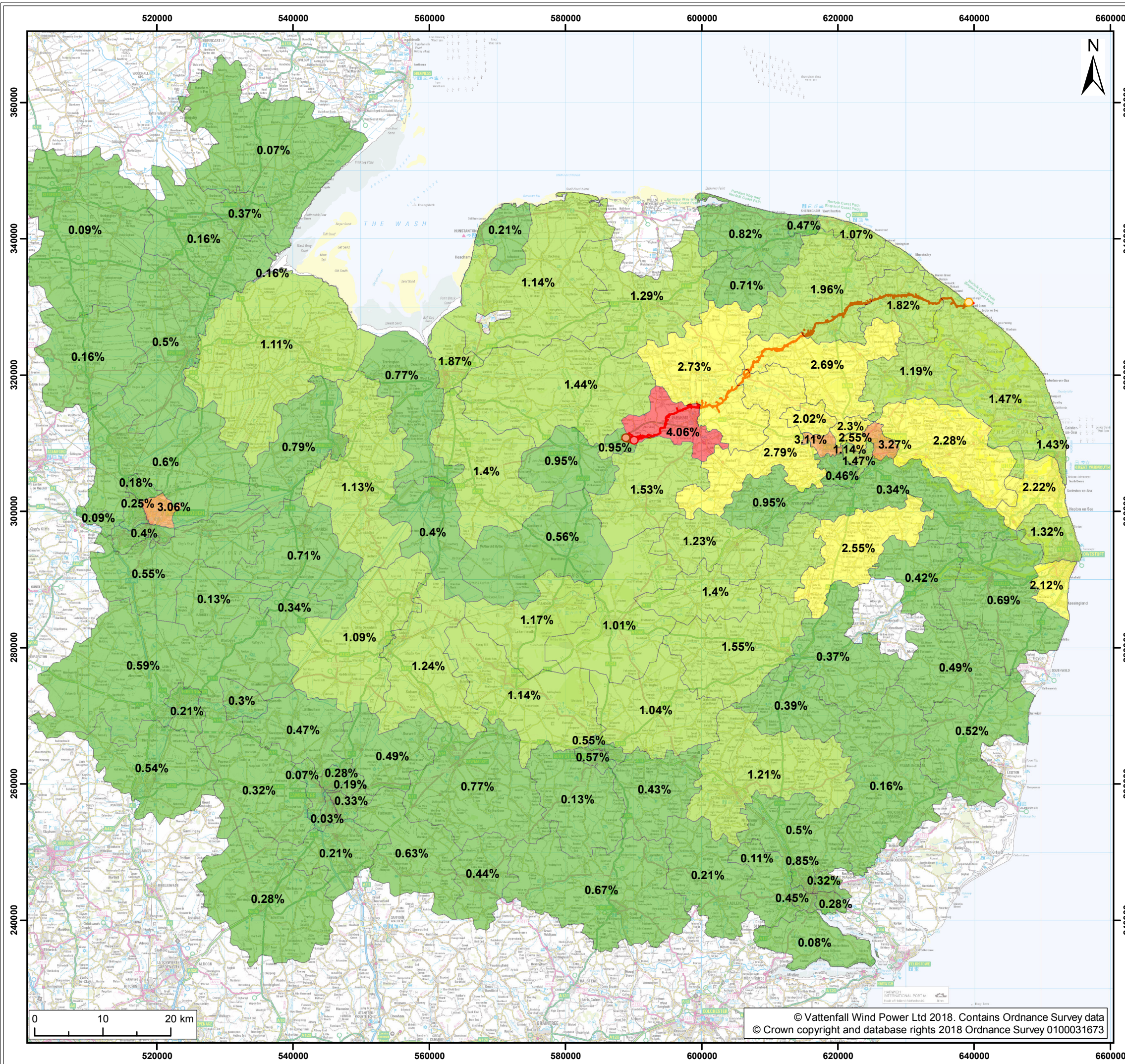
Title: Location of available bed spaces (in-migrant) 45 min journey time

Figure: 2	Drawing No: PB4476-006-006-001				
Revision: 03	Date: 18/05/2018	Drawn: NJ	Checked: RE	Size: A3	Scale: 1:375,000
02	14/05/2018	LB	RE	A3	1:375,000

Co-ordinate system: British National Grid EPSG: 27700



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**Legend:**

- Norfolk Vanguard onshore red line boundary
- Landfall zone location
- Onshore project substation location
- National Grid substation extension location

**Available construction workers (%)**

0 - 1
1 - 2
2 - 3
3 - 4
4+

Project: Norfolk Vanguard	Report: Outline Travel Plan
------------------------------	--------------------------------

Title:  
Location of available construction workers (resident) 90 min journey time

Figure: 3	Drawing No: PB4476-006-006-002				
Revision:	Date:	Drawn:	Checked:	Size:	Scale:
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02	14/05/2018	GC	RE	A3	1:550,000

Co-ordinate system: British National Grid EPSG: 27700

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