

Planning and Highways Delegations Committee

Date: **Wednesday 26 October 2022**

Time: **10am**

Venue: **Council Chamber, County Hall,
Martineau Lane, Norwich**

Advice for members of the public:

This meeting will be held in public and in person.

It will be live streamed on YouTube and, members of the public may watch remotely by clicking on the following link: https://www.youtube.com/channel/UCdyUrFjYNPfPq5psa-LFIJA/videos?view=2&live_view=502

However, if you wish to attend in person it would be helpful if, you could indicate in advance that it is your intention to do so as public seating will be limited. This can be done by emailing committees@norfolk.gov.uk.

The Government has removed all COVID 19 restrictions and moved towards living with COVID-19, just as we live with other respiratory infections. However, to ensure that the meeting is safe we are asking everyone attending to practise good public health and safety behaviours (practising good hand and respiratory hygiene, including wearing face coverings in busy areas at times of high prevalence) and to stay at home when they need to (if they have tested positive for COVID 19; if they have symptoms of a respiratory infection; if they are a close contact of a positive COVID 19 case). This will help make the event safe for all those attending and limit the transmission of respiratory infections including COVID-19.

Committee Membership

Voting Members:

Cllr Martin Wilby (Chair)
Cllr Graham Plant
Cllr Eric Vardy

Non-Voting Members:

Cllr Graham Carpenter
Cllr Brian Long
Cllr Paul Neale
Cllr Steve Riley
Cllr Mike Sands

**For further details and general enquiries about this Agenda please contact the
Committee Officer:**

Hollie Adams on 01603 223029 or email committees@norfolk.gov.uk

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A g e n d a

1. To receive apologies and details of any substitute members attending

2. Election of Chair

To elect a Chair from the Voting-Members of the Committee.

3. Election of Vice-Chair

To elect a Vice-Chair from the Voting-Members of the Committee.

4. Minutes of last meeting

To agree the minutes of the meeting held on 27 August 2021

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5. Declarations of Interest

If you have a **Disclosable Pecuniary Interest** in a matter to be considered at the meeting and that interest is on your Register of Interests you must not speak or vote on the matter.

If you have a **Disclosable Pecuniary Interest** in a matter to be considered at the meeting and that interest is not on your Register of Interests you must declare that interest at the meeting and not speak or vote on the matter

In either case you may remain in the room where the meeting is taking place. If you consider that it would be inappropriate in the circumstances to remain in the room, you may leave the room while the matter is dealt with.

If you do not have a Disclosable Pecuniary Interest you may nevertheless have an **Other Interest** in a matter to be discussed if it affects, to a greater extent than others in your division

- Your wellbeing or financial position, or
- that of your family or close friends
- Any body -
 - Exercising functions of a public nature.
 - Directed to charitable purposes; or
 - One of whose principal purposes includes the influence of public opinion or policy (including any political party or trade union);

Of which you are in a position of general control or management.
If that is the case then you must declare such an interest but can speak and vote on the matter

6. Any items of business the Chairman decides should be considered as a matter of urgency


7. Sheringham Shoal and Dudgeon Offshore Windfarm Extension Projects - Submission Consultation

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Report by the Executive Director of Community and Environmental Services.

Tom McCabe
Head of Paid Service
County Hall
Martineau Lane
Norwich
NR1 2DH

Date Agenda Published: 18 October 2022

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Planning and Highways Delegations Committee

**Minutes of the Meeting held on 27 August 2021 at 10am
in the Edwards Room, County Hall, Norwich**

Voting Members Present:

Cllr Martin Wilby (Chair)	Cabinet Member for Highways and Infrastructure
Cllr Andy Grant (Vice-Chair)	Cabinet Member for Environment and Waste
Cllr Graham Plant	Deputy Leader and Cabinet Member for Growing the Economy

Non-Voting Members Present:

Cllr Brian Long	Planning (Regulatory) Committee Chair
Cllr Paul Neale	Planning (Regulatory) Committee Green Group Spokesperson
Cllr Eric Vardy	Planning (Regulatory) Committee Vice-Chair

Officers Present:

David Cumming	Strategic Transport Team Manager
John Jones	Head of Environment

1 Apologies for Absence

- 1.1 No apologies were received. Cllr Mike Sands and Cllr Steve Riley were absent.

2. Minutes

- 2.1 The minutes of the meeting held on 3 June 2021 were agreed as an accurate record with an amendment to state that resolutions were agreed by voting members to ensure clarity on the decisions made.

3. Declarations of Interest

- 3.1 There were no interests declared.

4. Urgent Business

- 6.1 There was no urgent business discussed.

5. Applications for Development Consent Orders

- 5.1.1 The Committee received the report dealing with an opportunity to submit Written Representations to the Planning Inspectorate on proposal by Highways England to upgrade the A47 as part of the Planning Inspectorate's examination of Highways England's proposals, and on the future Development Consent Order (DCO) application for the Sheringham and Dudgeon Windfarm Extension Projects, due to be submitted to the Planning Inspectorate in Q3 2021. The proposals were deemed to be Nationally Significant Infrastructure Projects (NSIPs) and applications for development consent would be determined by the relevant Secretary of State.

- 5.1.2 The Strategic Transport Team Manager introduced the report to the Committee:
- Highways England, now called National Highways, were taking forward proposals for a number of schemes on the A47 to be determined by the Secretary of State; each scheme had a different timescale for submission and determination.
 - If the applications for the schemes on the A47 were granted, the work could start in early 2023 with completion by the end of the 2024-25 financial year
 - The Committee had agreed representations for the A47 North Tuddenham to Easton and A47/A11 Thickthorn Junction schemes at its 3 June 2021 meeting and for Blofield to Burlingham scheme at its 23 February 2021 meeting. The Thickthorn Junction representation had not yet been submitted. The deadline for this was 13 October 2021.
 - Since considered in June 2021 by the Committee, changes to the representations for the A47 North Tuddenham to Easton and A47/A11 Thickthorn Junction schemes were considered required, as set out in section 3.3 of the report. The points in relation to flood and water had been raised verbally in the examination hearing for the Blofield to Burlingham scheme, the deadline for written submissions having passed.
 - Members were also asked to agree updated comments to the Sheringham and Dudgeon Windfarm proposals; the amendments required to this scheme were set out in paragraph 3.3 of the report and if agreed would be submitted to the planning inspectorate for the next stage of consultation on the scheme.

- 5.2 The following points were discussed and noted:
- Officers confirmed that members were not being asked to reconsider the representation regarding taking over the old trunk road and confirmed that the previously agreed representations for schemes stated that assets should be brought into good commission before being taken on by the Council, as well as requesting a commuted sum in subsequent years. Officer discussions continued with the applicant to reach an agreement on such assets.
 - A discussion was held over the work of Dr Packman into the Barbastelle bat population around the A47, of which she had not yet released the data. A Member was concerned about the implications this could have for future development of National Highways schemes. The Strategic Transport Team Manager replied that if the results of Dr Packman's surveys were released then this information would be considered at the time including if there was any implication for the Council's representations. Norfolk County Council had commissioned ecologists to seek evidence on bat populations in respect of its own projects.
 - A Committee Member asked about shortfalls in the survey details discussed in the report; officers reported that data for the report was collected from a range of officers, some of whom had identified that the applicant's surveys could have covered additional information. This would all be submitted in the written representation from the council and considered in the Planning Inspectorate's examination of the schemes.
 - Cllr Neale asked for the Committee to "confirm that it will be making a recommendation to NCC to make application for 1) SAC accreditation in relation to the land situated within the Wensum Valley which has recently been found to be the home for a super colony of barbastelle bats, and/or 2) an amendment of the conservation objectives of the River Wensum SAC to include the commuting and foraging routes of the barbastelle bats found to be situated within the immediate area of the SAC. In answering this question the committee needs to keep in mind that 1) the presence of these bats has

been corroborated by NCC's own surveys, and 2) the protected status of the bats under Annexes II and IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora warrants designation of a SAC, as was the case in Chilmark Quarries SAC and Eversden and Wimpole Woods SAC". The Chair replied that the Committee this was not relevant to the Committee.

- It was discussed that it was important to focus on the information that was known at that time in order for the Committee to make their decision.

The voting Members of the Committee **RESOLVED** to:

1. Agree Written Representations / Local Impact Reports for the applications for Development Consent Orders on the A47, as set out in the relevant appendices to the report.
2. Agree amendments to previously agreed wording for Sheringham and Dudgeon Windfarm Extension Projects to be submitted to the Planning Inspectorate as part of the next stage of the consultation process.

The meeting ended at 10:32

CHAIR



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Planning and Highway Delegations Committee

Item No: 7

Report Title: Sheringham Shoal and Dudgeon Offshore Windfarm Extension Projects - Submission Consultation

Date of Meeting: Wednesday 26 October 2022

Responsible Cabinet Member: Cllr Martin Wilby (Cabinet Member for Highways, Infrastructure & Transport)

Responsible Director: Tom McCabe Exec Dir CES

Is this a Key Decision? No

Introduction from Cabinet Member

The above offshore windfarm and onshore grid connection infrastructure projects will be determined as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008. This Committee responded to an earlier consultation round on these projects in June 2021 and supported the principle subject to a number of detailed matters being resolved. Responding to such consultations will ensure the County Council's views are formally considered prior to a final decision being made by the Secretary of State.

As previously indicated these projects directly support the Government's target of delivering 40 gigawatts (GW) of offshore wind by 2030 set out in the Energy White Paper (2020) and The Ten Point Plan for a green industrial revolution (2020). These projects will contribute towards these targets, which includes powering every home in the UK from green energy and support up to 60,000 jobs. The County Council continues to work with both the offshore windfarm sector and National Grid to explore how these projects can support our own clean growth ambitions in line with the Government's vision for economic recovery that simultaneously addresses the challenge of climate change, offering opportunities for growth and job creation.

Executive Summary

The Sheringham Shoal Extension Project (SEP) and Dudgeon Extension Project (DEP) are Nationally Significant Infrastructure Projects (NSIPs). The developer, Equinor, have now submitted their Development Consent Order (DCO) application to the Planning Inspectorate (PINS). The proposal is to extend both the existing

Sheringham Shoal and Dudgeon offshore windfarms. The Sheringham Shoal Windfarm was completed in 2012 (88 wind turbines with an energy generating capacity of 317MW) and the Dudgeon offshore windfarm was completed in 2017 (67 wind turbines with an energy generating capacity of 402 megawatt (MW)). Up to 23 additional turbines are proposed for the SEP and up to 30 additional turbines are proposed for the DEP. The SEP and DEP would double the energy generating capacity of the existing offshore windfarms.

The offshore cables would make landfall at Weybourne (west of Weybourne Beach car park), on the North Norfolk Coast. The SEP and DEP would have a shared grid connection point at the Norwich Main substation.

The onshore infrastructure required for the project includes onshore connection infrastructure, substation at Norwich Main. Additionally, temporary infrastructure will be required during the onshore construction phase as construction compounds will be installed along the cable route corridor.

The development of the SEP and DEP will make an important contribution to the UK's target of 40GW of electricity generated by offshore wind by 2030. When operational the SEP and DEP would generate enough electricity to power 785,000 homes. These projects would support the County Council's net zero commitments as well as creating local jobs and longer term opportunities for developing skills in the offshore energy sector. As such the proposal is supported in principle. However, at this stage there is a holding objection in the absence of acceptable supporting information. In addition, Highway Officers are still assessing the detailed technical matters surrounding construction traffic and may need to raise further technical responses to the DCO.

The County Council will have further opportunities to influence the final outcome of the DCO through submitting further evidence as required during the Examination process including a Local Impact Report (LIR); and if consented will be involved in the formal discharge of any planning conditions/requirements as they directly affect the Authority.

Recommendations:

- 1. To support the principle of these offshore renewable energy proposals, subject to the detailed technical issues /comments set out in this report and Appendix 2 being resolved through the DCO process;**
- 2. There is a holding objection at this stage from the County Council as the Lead Local Flood Authority (LLFA) in the absence of acceptable supporting information; and**

3. To delegate any further detailed technical responses needed to officers as part of the above consultation and/or in preparing any further evidence for the Examination of the DCO.

1. Background and Purpose

- 1.1. The purpose of this report is to assess the proposals for the extension of two offshore windfarms and the onshore ancillary grid connection infrastructure in Norfolk. It should be noted that the final decision for these proposals will be determined by the Secretary of State for Business, Energy and Industrial Strategy as it is defined as a NSIP under the Planning Act 2008. This is a DCO application consultation under Section 56 of the above Act.
- 1.2. The County Council was previously consulted by the applicant in early 2021 on the pre-application consultation (Section 42 of the 2008 Planning Act) [see the Planning and Highways Delegations Committee agenda and minutes from 3 June 2021](#). Members agreed with the recommendations as set out in the report to support the principle of the projects subject to detailed issues being resolved. The County Council also responded to an additional consultation on the main compound selection in February 2022. The County Council did not raise any substantive strategic planning and highways issues to this additional consultation.
- 1.3. The DCO application is now being handled by PINS under Section 56 of the above 2008 Planning Act. This is the final opportunity to respond to the DCO application ahead of the formal Examination process and a response will facilitate the County Council's involvement in the Examination process should this be necessary. The County Council will also have an opportunity to submit a LIR under S60(3) of the Act as part of the Examination providing further details and evidence in respect of the application's overall impact on the County Council's function.
- 1.4. Members will be aware the existing Sheringham Shoal offshore windfarm generating 317MW which has been operational since 2012 and the Dudgeon offshore wind farm generating 402MW which has been operational since 2017. The SEP and DEP comprises of up to 53 additional offshore wind turbines, array cables, offshore substations, interlink cables, cable protection, export cables (Up to 102 km), onshore cables (60 km), an onshore project substation, and grid connection infrastructure (see details below and in Appendix 1).
- 1.5. In addition, Members will be aware that there are other offshore windfarms which have recently gained consent: Hornsea Project Three (2.4GW) (consented in December 2020), Norfolk Boreas (1.8GW) (consented December 2021), and Norfolk Vanguard (1.8GW) (consented February 2022).

2. Proposal

- 2.1. The SEP and DEP are located in the Greater Wash region of the southern North Sea. The closest point to the coast is 15.8 km from SEP and 26.5 km from DEP, see offshore location map in Appendix 1.1.
- 2.2. The new offshore infrastructure required includes the following, see Appendix 1.4 for full details:
 - 13 to 23 offshore wind turbines for SEP
 - 17 to 30 offshore wind turbines for DEP
 - Wind turbines with maximum tip height of 330m
 - Offshore substation platform/s (OSP)
 - Foundation structures for wind turbines and OSP
 - Infield cables
 - Interlink cables
 - Export cables from the wind farm sites to the landfall.
- 2.3. The number of wind turbines is dependent on the size of wind turbine. There are two options either 15MW or 26MW wind turbines. The decision on size and therefore number of wind turbines will be made at a later date post consent by the operator.
- 2.4. The new onshore infrastructure required is set out in Appendix 1.5 and summarised below:
 - Landfall and associated transition joint bay/s at Weybourne
 - Onshore export cables installed underground from the landfall to the onshore substation and associated joint bays and link boxes (approx. 60 km)
 - Onshore substation and onward 400 kilovolt (kV) connection to the existing Norwich Main substation, two options:
 - 3.25ha in size for SEP or DEP alone or 6ha total for SEP and DEP together, under both scenarios the substations would be 15m in height maximum
 - Trenchless crossing zones (e.g., Horizontal Directional Drilling (HDD)) e.g., under roads etc
 - Construction and operational accesses
 - Temporary construction compounds.
- 2.5. The onshore cable corridor width would either be 45m (single project) or 60m (projects combined) and this is required to excavate trenches which the ducts will be buried, and cables pulled through, see Appendix 1.2 for the cable route map.
- 2.6. The installation of the onshore cable infrastructure is expected to take 26 months if both SEP and DEP are constructed at the same time. If SEP and DEP are constructed in isolation construction on the onshore cables is expected to take up to 24 months per project.

- 2.7. The onshore substation will be constructed to accommodate both SEP and DEP (6ha in size). But, if only one of the projects were to come forward alone the substation would be smaller (3.25ha in size).
- 2.8. Following the construction of the onshore works, the onshore area will be reinstated and returned to its previous uses, with the exception of the onshore substation which will remain in place throughout the 40-year operational life of the SEP and DEP.
- 2.9. There are three scenarios associated with this project, which are dependent on what is consented. The scenarios assessed are:
- In isolation – where only SEP or DEP is constructed
 - Offshore construction duration of approximately 2 years
 - Onshore construction duration of approximately 2 years
 - Sequential – where SEP and DEP are constructed in a phased approach with either SEP or DEP being constructed first
 - Offshore construction duration of approximately 2 years per project
 - Onshore construction duration of approximately 2 years per project
 - Concurrent – where SEP and DEP are both constructed at the same time
 - Offshore construction duration of approximately 2 years
 - Onshore construction duration of approximately 2 years.
- 2.10. The County Council continue to favour an integrated approach rather than a “separated” approach as this would be less disruptive in terms of construction of the onshore infrastructure needed.
- 2.11. County Council Members have been consulted on this proposal whose Divisions falls within the landfall, onshore cable route and/or substation. All relevant County Council service departments have been consulted on the proposal. Additionally, parish and town councils and local residents have the opportunity to respond to the proposal through the statutory planning process.

3. Impact of the Proposal

- 3.1. The principal role of the County Council in responding to the above windfarm proposals, and the onshore infrastructure requirements, is in respect of the Authority’s statutory role as:
- Highways Authority
 - Minerals and Waste Planning Authority
 - Lead Local Flood Authority
 - Public Health Responsibilities

3.2. In addition, the County Council has an advisory environmental role and economic development function, which also needs to feed into any response made to the above windfarm proposals.

3.3. Other statutory consultees include:

Natural England	Highways England
Historic England	Drainage Boards
Marine Management Organisation	Public Health England
Maritime and Coastguard Agency	Energy and utility companies with cable and pipeline interests
Civil Aviation Authority	Parish, Town, District and other County Councils

3.4. With regard to the Parish Councils impacted by these proposals the County Council has received a number of letters raising concern relating to the onshore cable routes and grid connection infrastructure needed. There are local concerns relating to the disruption these projects will cause during their construction and the potential cumulative impacts associated with other NSIP projects in Norfolk. It is understood that the applicant (Equinor) has engaged directly with those Parish Councils and communities most likely to be affected; and these Parish Councils will have the opportunity to make their own representation through the formal statutory consultation process.

Assessment / Comments

3.5. In relation to the previous comments submitted of the Section 42 consultation and the County Council raised the following points (June 2021):

- The principle of the project is supported;
- Consideration of feeding electricity into local transmission networks to facilitate planning housing and employment growth;
- A requirement for an Employment and Skills Strategy;
- Compensation for those affected by the cumulative impacts of construction, including local businesses and fishermen;
- Concern over the cumulative impacts of the SEP and DEP projects being developed separately;
- Concern over the onshore cable route, requiring this route to not fetter the highway improvement schemes in Norfolk, including the Norwich Western Link and A47 improvement schemes;
- Historic Environment Team requiring additional geophysical surveys.

3.6. And the following points were raised from the main construction compound consultation:

- The County Council supported the location of the main construction compound being at the greenfield site at Attleborough (A1067 Fakenham Road);
- The Lead Local Flood Authority required the applicant to consider surface water drainage issues at the main compound site;

- The Natural Environment team required a 10m stand-off between the compound and the trees to the southeast of the site.
- 3.7. The above comments have largely been positively considered and addressed by the applicant or will be addressed through on-going DCO process.

Grid Connection and Electricity Supply

- 3.8. The SEP and DEP projects will feed directly into the National Grid at Norwich Main. The submitted DCOs do not extend beyond the onshore cable routes and grid connection infrastructure at Norwich Main. Members will be aware that there are separate proposals by National Grid to reinforce the electricity transmission network (400 kV overhead power lines) between Norwich Main substation and Tilbury substation in Essex, known as the East Anglia Green (EAG) Project. This project, which is still at the pre-application stage, is needed according to the National Grid to increase capacity into the existing network to cater for additional electricity generated principally from the offshore wind energy sector.
- 3.9. The County Council in responding to the non-statutory consultation on the EAG project (June 2022) indicated, *inter alia*:
“Any new electricity infrastructure needs to benefit Norfolk as whole and be capable of supplying existing and planned growth in housing and employment (commercial development).”
- 3.10. The County Council is in continued discussions with National Grid and UK Power Networks (Distribution Network Operator) to look into the potential to feed electricity into the local transmission networks as part of the EAG project, which will be taken forward through the NSIP process in 2023.
- 3.11. Equinor, PINS, and the Secretary of State need to be aware of these on-going issues regarding the need for improved access to new electricity infrastructure to support the planned housing and employment growth across the County; and recognise the need for joined-up/collaborative approach between the various infrastructure providers (i.e., Equinor; National Grid and UK Power Networks) to deliver power where it is needed in Norfolk.

Socio-Economic

- 3.12. Equinor have indicated through their economic modelling that their two projects could create up to 2,190 UK jobs and £124.5 million gross value added (GVA) per annum during construction. They estimate that 450 of these jobs would be in East Anglia and £23.7 million GVA generated in the Region annually assuming an East Anglia construction port is used. A further 230 jobs will be generated once operational of which 85 would be within East Anglia.
- 3.13. As previously commented the economic benefits of the above projects are welcomed and officers are working with Equinor to develop an Employment and

Skills Strategy. The County Council would wish to see the applicant develop through the DCO process a strategy to accompany the development and secure demonstrable benefits to both the local economy and workforce. Such a Strategy would need to be agreed with both the County Council and the District Councils affected, along with the New Anglia Local Enterprise Partnership.

- 3.14. The County Council would also like to see a local community benefit fund set up outside the planning process, as is being undertaken by other offshore windfarm promoters, designed to support / assist those wider communities affected by the projects.

Highways

- 3.15. Detailed discussions and negotiations will remain on-going throughout the DCO application process, particularly in respect of any temporary road closures; construction traffic management plans (CTMPs); and other travel related planning. Notwithstanding these ongoing discussions, officers have assessed the impact of construction traffic on receptors along 140 roads (over 300 miles of road network) including consideration of pedestrian delay, road safety, driver delay and abnormal (large) deliveries.
- 3.16. Resulting from the above, mitigation measures will be needed including reducing construction vehicle numbers on certain routes and the use of escort vehicles and/or provision of passing places along narrow roads. An Outline Traffic Management Plan (OTMP) will be submitted as part of the DCO and then completed when the contractor is appointed. The final mitigation will be agreed with the contractor.
- 3.17. A cumulative impact assessment has also been undertaken to assess impacts with other significant projects, notably other offshore windfarms and highways schemes (e.g., widening / dualling of the A47 between Easton to North Tuddenham). Roads that could be utilised by the other projects have been identified. Officers are satisfied that the potential for cumulative impacts can be managed through the respective projects' CTMPs.
- 3.18. The County Council's highway officers are still carefully assessing the supporting documentation in respect of the above matters and will make appropriate comments under delegated officer powers and feed these back to PINS within the prescribed consultation period. This may include, where appropriate:
 - (a) Raising any necessary holding highway objection in the event that highway safety is deemed to be compromised; and/or
 - (b) Seeking Planning Conditions (Requirements) to be attached to the DCO in order to overcome any highway issue.

Lead Local Flood Authority

3.19. At present, two outline surface water drainage designs have been developed but neither has been selected as the preferred option as the applicant is not yet able to state where they are intending to discharge surface water to for disposal. Further information on the proposed surface water drainage will need to be provided for the Lead Local Flood Authority (LLFA) to review.

3.20. At this stage, the County Council as the LLFA has considered the outline surface water drainage design as set out in the Outline Operational Drainage Plan; as well as the Flood Risk Assessment (FRA); Onshore Sub-station Drainage Study; and accompanying Hydraulic Modelling. At this time, further evidence and clarification of information is required to demonstrate:

- That the proposed development is in accordance with National Planning Policy Framework (NPPF) with regard to the risk of flooding. There is currently insufficient information to demonstrate that surface water arising from the development would not result in an increase of flood risk to the proposed development at the Onshore Sub-Station or elsewhere.
- There is a lack of confirmation of where the surface water drainage proposals for the onshore sub-station will drain, site specific greenfield runoff rates and volumes, the comparable post-development runoff rate and volumes proposed to prevent an increased risk of flooding elsewhere.
- The hydraulic modelling on which the FRA, which influences the proposed development design, and its associated drainage design requires updating and clarification.

3.21. As such the LLFA has a holding objection to the onshore elements of this proposal.

Reason

3.22. To prevent flooding in accordance with NPPF paragraph 167, 169 and 174 by ensuring the satisfactory management of local flood risk, surface water flow paths, storage, and disposal of surface water from the site in a range of rainfall events and ensuring the sustainable drainage systems proposed operates as designed for the lifetime of the development.

3.23. The LLFA would remove its holding objection if the following issues are adequately addressed:

1. An updated FRA and Drainage Strategy that confirms the proposed surface water discharge location for the onshore sub-station.
2. The provision of the site-specific greenfield runoff rates and volumes, the comparable post-development runoff rate and volumes.

3. An updated hydraulic model that appropriately applies the latest climate change allowances and provides an assessment of the change in flood risk.
 4. Adequate consideration of the surface water flood risk associated with discharging to the foul sewer in Swainsthorpe and the residual risks.
 5. A maintenance and management plan detailing the activities required and details of who will adopt and maintain all the surface water drainage features for the lifetime of the development.
- 3.24. The LLFA may need to make further detailed comments on the above matters as part of the Examination process and through submission of the County Council's LIR; and if appropriate an agreed emergency flood plan for the onshore sub-station (construction and operation), landfall site (construction only) and the onshore cable route (construction only).

Local Member Views

- 3.25. Local Member comments on the proposals will be reported orally at the committee.

4. Evidence and Reasons for Decision

- 4.1. Responding to this statutory consultation as recommended will enable the County Council's detailed points on Equinor's proposed offshore windfarm proposals to be considered through the DCO process prior to a final decision being made by the Secretary of State.
- 4.2. This will help to bring forward the best scheme supporting the County Council's clean growth ambitions in line with the Government's vision for economic recovery that simultaneously addresses the challenge of climate change whilst minimising the environmental impact of the project.

5. Alternative Options

- 5.1. The County Council could choose not to respond to this S56 consultation, but this would not enable the County Council's detailed points on Equinor's proposed offshore windfarm proposals to be considered and taken into account.

6. Financial Implications

- 6.2. Officers have engaged with the applicant at the technical scoping stage; attending steering group and topic-based meetings and provided technical advice and information in respect of the County Council's statutory responsibilities. The County Council is in discussion with the applicant with

regard to the preparation of a Planning Performance Agreement (PPA), which would allow for the cost recovery of officer time spent on these projects and include time spent on any Discharge of Planning Requirements post consent.

7. Resource Implications

7.1 Staff: Staff resources for dealing with these projects are being met from existing resources; and in the future through a PPA (see above).

7.2 Property: N/A

7.3 IT: N/A

8. Other Implications

8.1 Legal Implications: N/A

8.2 Human Rights Implications: N/A

8.3 Equality Impact Assessment (EqIA) (this must be included):

The Council's Planning functions are subject to equality impact assessments. A detailed equality impact assessment has not been carried out as this report is responding to a consultation, however, consideration has been given to equality issues. The Council's Planning functions are subject to equality impact assessments. The recommended comments relate to the County Council's role as a statutory consultee. This report and the comments aim to ensure that any new onshore development will have minimal impact on communities, while supporting the County Council's own clean growth ambitions in line with the Government's vision for economic recovery.

8.4 Data Protection Impact Assessments (DPIA): N/A

8.5 Health and Safety implications (where appropriate): The wider Public Health implications of these proposals is set out in Appendix 2.

8.6 Sustainability implications (where appropriate): These are considered in the main text of the Report.

8.7 Any Other Implications: N/A

9. Risk Implications / Assessment

9.1 The County Council is a statutory consultee on any Nationally Significant Infrastructure Project determined by the Secretary of State. The County Council will also be invited to submit a LIR, the content of which is a matter for the Local

Authority and can include local transport issues and the local area characteristics.

10. Select Committee Comments

Given the timetable to respond to this formal / statutory consultation there has not been the opportunity to take this NSIP through the Select Committee process.

11. Recommendations

- 1. To support the principle of these offshore renewable energy proposals, subject to the detailed technical issues /comments set out in this report and Appendix 2 being resolved through the DCO process;**
- 2. There is a holding objection at this stage from the County Council as the Lead Local Flood Authority (LLFA) in the absence of acceptable supporting information;**
- 3. To delegate any further detailed technical responses needed to officers as part of the above consultation and/or in preparing any further evidence for the Examination of the DCO.**

12. Background Papers

- [Consultation Documentation](#)
- [The Planning Act \(2008\)](#)
- [The National Planning Policy Framework \(2021\)](#)
- [Energy Act \(2013\)](#)
- [The Clean Growth Strategy \(2017\)](#)
- [The ten-point plan for a green industrial revolution \(2020\)](#)
- [The Energy White Paper \(2020\)](#)

Officer Contact

If you have any questions about matters contained within this paper, please get in touch with:

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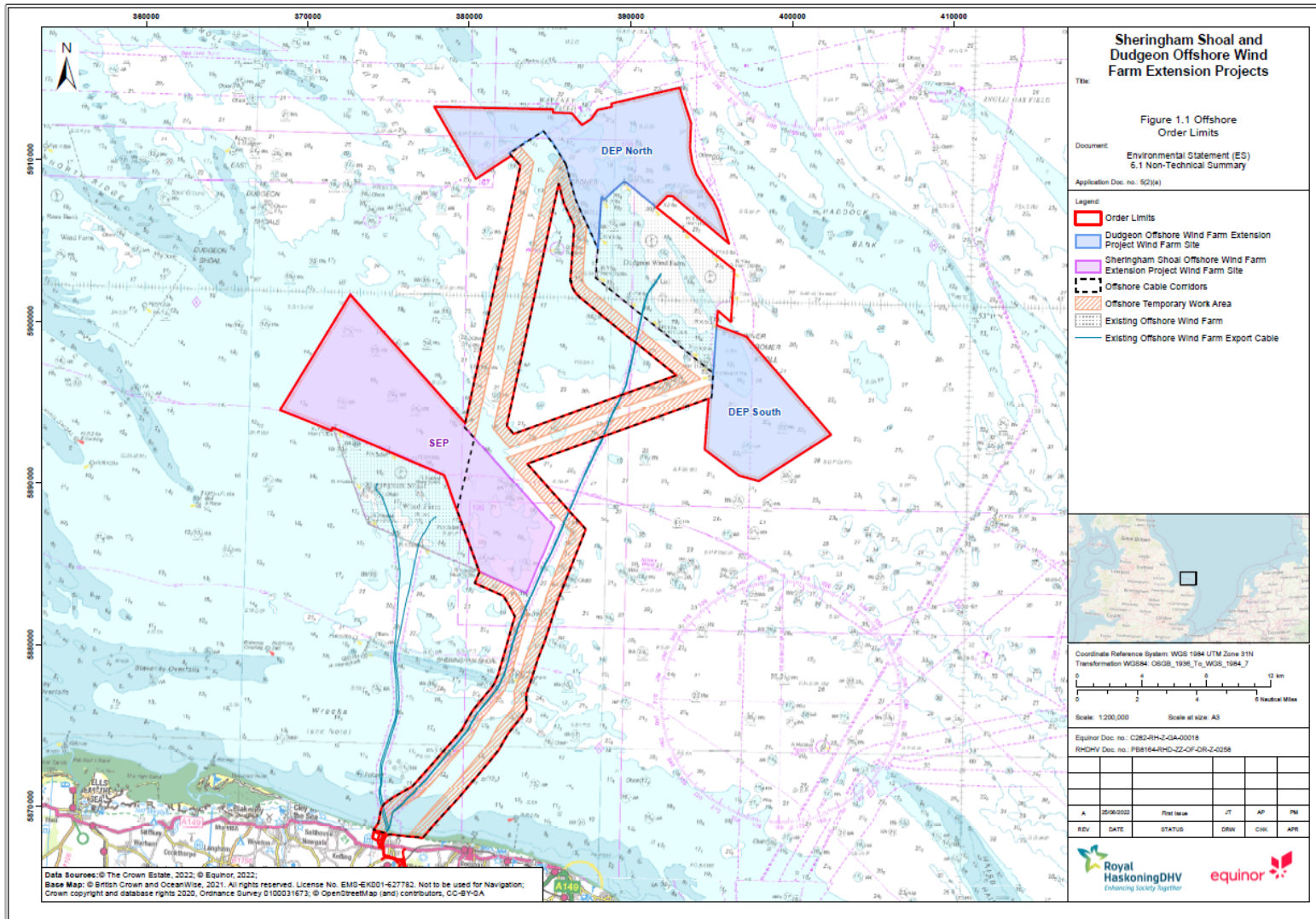
Email: naomi.chamberlain@norfolk.gov.uk



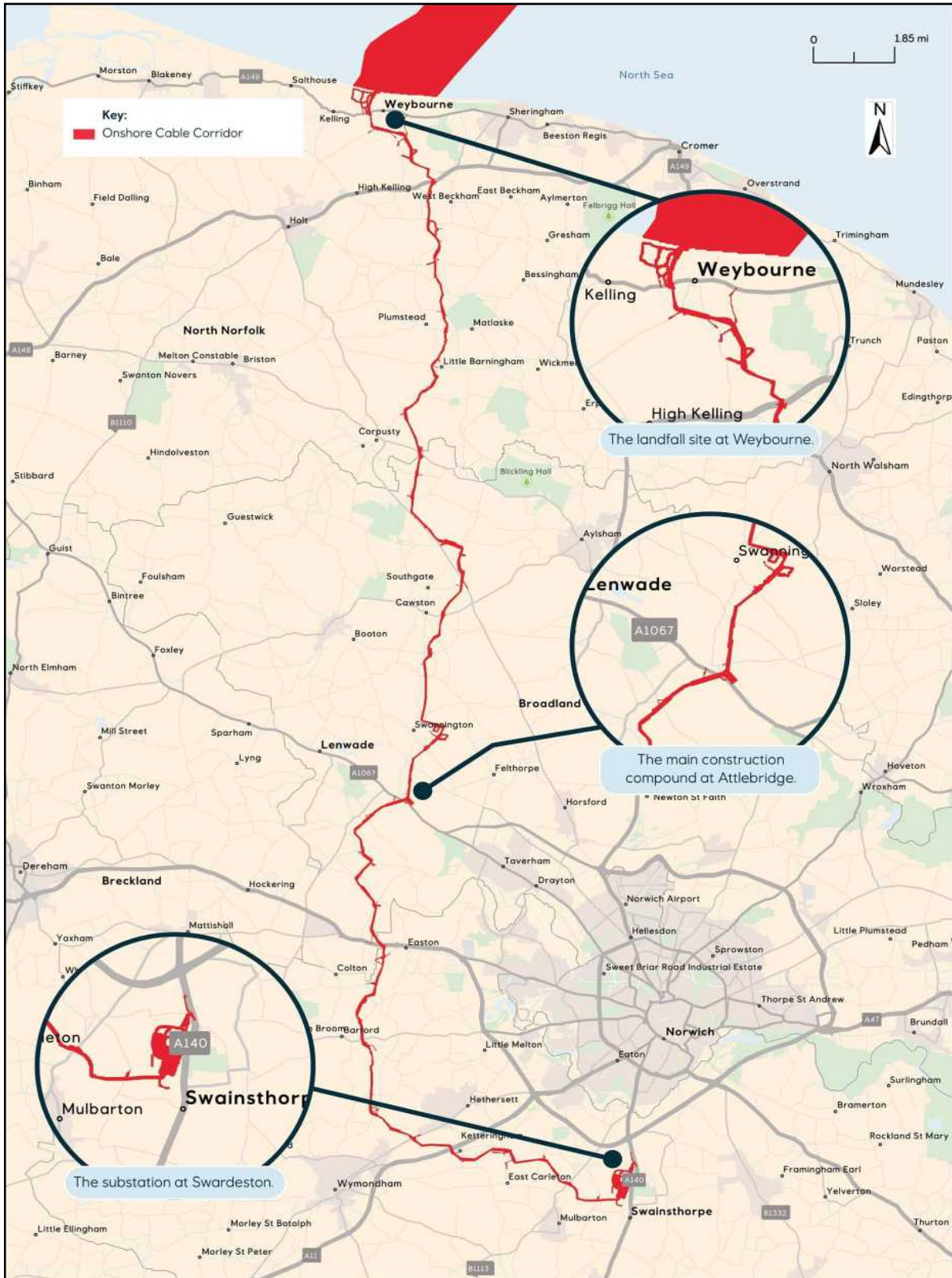
If you need this report in large print, audio, braille, alternative format or in a different language please contact 0344 800 8020 or 0344 800 8011 (textphone) and we will do our best to help.

Appendix 1

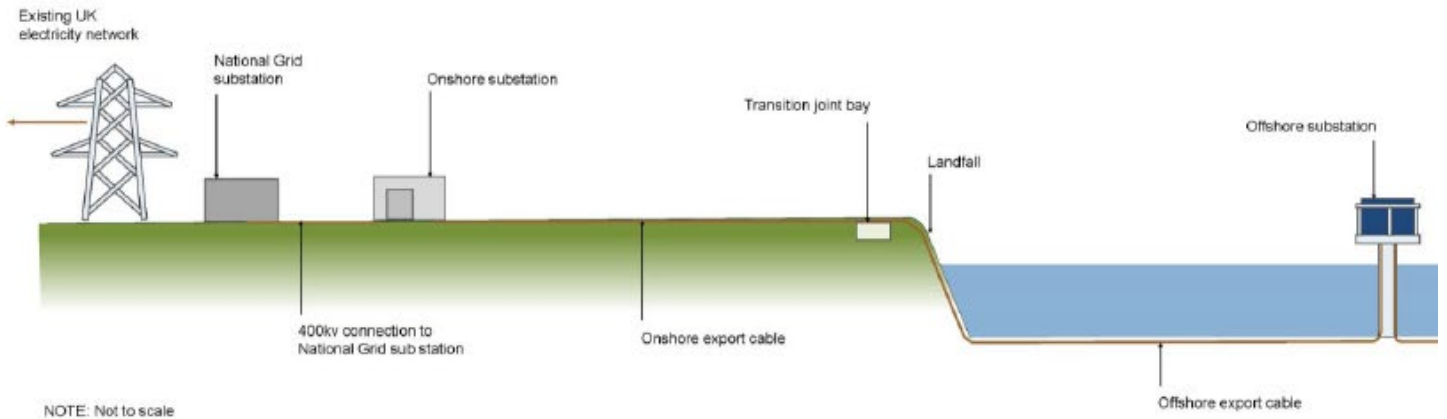
Appendix 1.1 Offshore Locations of existing Windfarms and Extension project locations, also showing offshore cable corridor



Appendix 1.2 Onshore Cable Corridor Route



Appendix 1.3 SEP and DEP Overview Schematic (not to scale)



Appendix 1.4 Offshore Scheme Summary

Parameter	DEP	SEP	Combined
Lease period (years)	50	50	50
Indicative construction duration (years) (excluding landfall works)	2	2	4 (max. gap of 4 years between SEP and DEP, start to start)
Anticipated design life (years)	40	40	40
Number of wind turbines	17-30	13-23	30-53
Wind farm site area (array) (km ²)	114.75	97.0	211.75
Closest point from wind farm site to coast (km)	26.5	15.8	n/a
Maximum length of export cable SEP to landfall (per cable) (km)	n/a	40	n/a
Maximum length of export cable DEP to landfall ¹ (per cable) (km)	62	n/a	62
Maximum number of export cables and trenches	1 & 1	1 & 1	2 & 2
Maximum total length of all interlink cables (km)	66	n/a	154 ²
Maximum turbine rotor diameter (m)	300	300	300
Maximum tip height above Highest Astronomical Tide (HAT) (m)	330	330	330
Minimum clearance (air gap) above HAT (m)	30	30	30
Rotor swept area (km ²)	1.20-1.30	0.92-1.00	2.12-2.30
Indicative minimum and maximum separation between wind turbines (inter-row) (km)	1.05-3.3	1.05-3.3	1.05-3.3
Maximum infield cable length (not incl. interlink cables) (km)	135	90	225
Lease period (years)	50	50	50
Indicative construction duration (years) (excluding landfall works)	2	2	4 (max. gap of 4 years between SEP and DEP, start to start)

Appendix 1.4 Offshore Scheme Summary Continued

Parameter	DEP	SEP	Combined
Anticipated design life (years)	40	40	40
Number of wind turbines	17-30	13-23	30-53
Wind farm site area (array) (km ²)	114.75	97.0	211.75
Closest point from wind farm site to coast (km)	26.5	15.8	n/a
Maximum length of export cable SEP to landfall (per cable) (km)	n/a	40	n/a
Maximum length of export cable DEP to landfall ¹ (per cable) (km)	62	n/a	62
Maximum number of export cables and trenches	1 & 1	1 & 1	2 & 2
Maximum total length of all interlink cables (km)	66	n/a	154 ²
Maximum turbine rotor diameter (m)	300	300	300
Maximum tip height above Highest Astronomical Tide (HAT) (m)	330	330	330
Minimum clearance (air gap) above HAT (m)	30	30	30
Rotor swept area (km ²)	1.20-1.30	0.92-1.00	2.12-2.30
Indicative minimum and maximum separation between wind turbines (inter-row) (km)	1.05-3.3	1.05-3.3	1.05-3.3
Maximum infield cable length (not incl. interlink cables) (km)	135	90	225
Wind turbine foundation type options	Piled monopile; Suction bucket monopile; Piled jacket; Suction bucket jacket; and Gravity base structure (GBS).	Piled monopile; Suction bucket monopile; Piled jacket; Suction bucket jacket; and Gravity base structure (GBS).	Piled monopile; Suction bucket monopile; Piled jacket; Suction bucket jacket; and Gravity base structure (GBS).
Met masts	0	0	0

Maximum number of OSPs	1	1	2
OSP foundation type options	Piled jacket; or Suction bucket jacket.		
<p>¹ Applies either to a DEP in isolation development scenario, or for SEP and DEP with a separate OSP in the DEP North array area.</p> <p>² Applies to the scenario with one OSP in the SEP wind farm site and assuming only the DEP North array area is developed – see Section 4.4.7.2 for further details.</p>			

Appendix 1.5 Onshore Cable Corridor Route Worst-Case Parameters

Parameters	SEP or DEP in isolation	SEP and DEP– concurrent	SEP and DEP– sequential
Onshore cable corridor length	60km	60km	60km for each Project
Number of circuits	1	2	2
Number of cables per circuit	1 circuit: 3 x HVAC + 1 fibre optic	2 circuits, each circuit: 3 x HVAC + 1 fibre optic	2 circuits, each circuit: 3 x HVAC + 1 fibre optic
Onshore haul road length	55km	55km	55km for each Project *
Number of simultaneous work fronts	Up to 10	Up to 10	Up to 10 for each Project
Total number of temporary construction compounds	1 main compound . 8 secondary compounds	1 main compounds . 8 secondary compounds	1 main compound. 8 secondary compounds for each Project *
Size of main compound	30,000m ²	30,000m ²	30,000m ²
Size of secondary compounds	2,500m ² (two of these secondary compounds may be up to 7,500m ² to accommodate batching of cement bound sand (CBS))	2,500m ² (two of these secondary compounds may be up to 7,500m ² to accommodate batching of cement bound sand (CBS))	2,500m ² (two of these secondary compounds may be up to 7,500m ² to accommodate batching of cement bound sand (CBS))
Cable corridor width	45m	60m	60m
Approximate working easement	27m	38m	45m
Cable corridor width at trenchless crossings	Up to 100m	Up to 100m	Up to 100m
No. trenches	1	2	2
Depth of trenches	Up to 2m	Up to 2m	Up to 2m
Minimum depth of cable after burial	1.2m	1.2m	1.2m
Approximate width at surface of trench	3m	3m	3m
Approximate width at base of trench	0.85m	0.85m	0.85m

Appendix 1.5 Onshore Cable Corridor Route Worst-Case Parameters Continued

Parameters	SEP or DEP in isolation	SEP and DEP-concurrent	SEP and DEP-sequential
Approximate volume of trench excavated material (including joint bays)	198,000m ³	396,000m ³	396,000m ³
Approximate volume of excavated material for off-site disposal	4,200m ³	8,400m ³	8,400m ³
Trenchless crossings compound size	1,500 - 4,500m ²	1,500 - 4,500m ²	1,500 - 4,500m ²
Typical jointing bay and link box frequency	Every 1000m	Every 1000m	Every 1000m
Total No. jointing bays and link boxes	60	120	120
Jointing bay dimensions (length x width x depth)	Up to 16m x 3.5m x 2m	Up to 16m x 3.5m x 2m	Up to 16m x 3.5m x 2m
Depth to top of jointing bay (m)	> 1.2m	> 1.2m	> 1.2m
Link box (length x width x depth) if below ground	Up to 2.6m x 2m x 1.5m (plus an above ground marker post at each location)	Up to 2.6m x 2m x 1.5m (plus an above ground marker post at each location)	Up to 2.6m x 2m x 1.5m (plus an above ground marker post at each location)

Appendix 2 County Council Response to the Sheringham Shoal Extension Project and Dudgeon Extension Project – Detailed Comments

1. Natural Environment

1.1. Arboriculture:

- 1.2. An Arboricultural Survey Report - Volume 3, Appendix 20.15 (Wild Frontier Ecology, September 2022) along with the ecology reports provided by Wild Frontier Ecology have provided an overview to inform the Development Consent Order (DCO) application and have been referenced to refine the proposed cable route.
- 1.3. From an arboriculture perspective the County Council is satisfied that the correct procedures have been followed to inform the design and construction of the onshore cable route and associated access routes and infrastructure to reduce the impact on significant trees and woodland as far as practically possible.
- 1.4. Advice on possible arboricultural impacts, mitigation and compensation options has been provided in Table 4 and elaborated in Sections 6.2-6.5 of the Arboricultural Survey Report; however, the report has not provided a full tree survey of the DCO boundary but has looked initially at the Area of Outstanding Natural Beauty (AONB) and the Norwich Main substation and provided a desk study for the remaining cable route.

A full tree survey and Arboricultural Impact Assessment of trees within the DCO boundary, including trees within 15m of the boundary, will be required prior to work on the onshore cables commencing. This will ensure that tree protection measures are secured through Tree Protection Plans and an Arboricultural Method Statement.

A full tree survey will also highlight any additional veteran and ancient trees to allow consultation with an arboriculturist to devise suitable mitigation measures such as horizontal directional drilling and ensure that entry and exit pits for trenchless crossings are at least 15m from the stems of any retained trees and outside prescribed veteran tree buffer zones.

- 1.5. Post DCO consent, once the extent of tree and habitat loss are quantified, an appropriate detailed landscape scheme must be submitted as stated in the Outline Landscape Management Plan. This should take account of Biodiversity Net Gain as per the submitted documents Appendix 9.19.2 - Outline Biodiversity Net Gain Strategy and Environmental Statement (ES) Appendix 20.6 - Initial Biodiversity Net Gain Assessment Report (document reference 6.1.20.6).

Ecology:

- 1.6. It should be noted that our response is necessarily limited in extent, due to

the role that Norfolk County Council has in relation to Nationally Significant Infrastructure Projects) (NSIP's), with the relevant District Council(s) expected to have a more significant input, for example due to their role regarding the agreement and enforcement of planning requirements. Comments below refer to onshore ecology only.

- 1.7. Having reviewed Chapter 20 (Onshore Ecology & Ornithology) of the environmental statement, the County Council is satisfied it has been informed by adequate habitat and species surveys and data analysis. The ecological mitigation hierarchy appears to have been adhered to, with the embedded mitigation (as summarised in the Schedule of Mitigation & Mitigation Route map Document Ref. 6.5) welcomed. However, it is important to note that additional mitigation measures (as identified in Table 1: Offshore Mitigation Measures and Table 2: Onshore Mitigation Measures) will be required to be secured via DCO requirements. Of particular note is the DCO Schedule 2, Part 1, Requirement 13 for an Ecological Management Plan (EMP).
- 1.8. The Outline EMP (Ref. 9.19) appears fit for purpose, noting however, that a Final EMP (DCO requirement 13) will be required to be submitted and should include details of all updated and pre-commencement surveys as necessary. The submission of an associated Construction Environmental Management Plan (CEMP) will also be required to be submitted.
- 1.9. Regarding the Outline Code of Construction Practice (Ref. 9.17) (Requirement 19 of the Draft DCO), it should be noted that a range of detailed environmental management plans will be required to be produced as set out in Table 1-1, including for example, a Dust Management Plan, Invasive Non-native Species Management Plan and Artificial Light Emissions Management and Mitigation Plan.
- 1.10. The Outline Biodiversity Net Gain (BNG) Strategy (Ref. 9.19.2) has been informed by an Initial BNG Assessment (ES Appendix 6.3.20.6). The Strategy states that the applicant has committed to deliver a positive BNG for the project, which is welcomed, however, although while not yet mandatory under the Environment Act for NSIP's, the achievement of a minimum 10% BNG figure is strongly encouraged.
- 1.11. It is of concern to note that the Initial BNG Assessment indicates a net loss of 0.5% Habitat Units and a net loss of 0.98 River Units, with only the Hedgerow Units currently indicating a positive gain of 3.02% (as per Table 4 Summary of Biodiversity Metric).
- 1.12. It is noted that only 90% of the area has been assessed to date, and that the BNG calculations will require updating as the construction parameters and detailed restoration proposals are finalised.
- 1.13. The Strategy states that BNG opportunities are to be developed further with stakeholder's post consent, with detailed and refined calculations provided on the final design. Norfolk County Council's Natural Environment Team

would welcome the opportunity to engage in this process.

- 1.14. There does not appear to be a requirement in the current Draft DCO to secure the submission of a BNG Strategy and therefore it is recommended that further consideration is given to its specific inclusion in the DCO.
- 1.15. The Outline Landscape Management Plan (LMP) (Ref.9.18) (Requirement 11 of the Draft DCO) is a key document to facilitate the delivery of BNG targets and should therefore be developed with this in mind. Opportunities to enhance and create suitable habitats should be sought at every opportunity as the final version of the LMP is further refined.

Landscape:

- 1.16. These comments are limited in nature due to Norfolk County Council's remit within the process. Detailed comments on Landscape and Visual, Planting and Landscape Plans should be sought from the relevant district councils.
- 1.17. Chapter 26 – Landscape and Visual Impact Assessment (LVIA) The County Council is satisfied that the methodology for the LVIA follows industry standard guidance and practices and is fit for purpose. Suitably data sources have been used for the desk top study aspects of the assessment and the viewpoints selected have been done so in coordination with relevant parties. It is noted that the LVIA is based on a “mitigation by design” approach and therefore there are no further measures proposed for mitigation. There are some long-term effects that will remain even once planting has established, that are therefore residual. Detailed views on these residual effects should be sought from District officers, however the County Council is willing to be part of any ongoing discussions.

2. Historic Environment Service

- 2.1. The Historic Environment Service has been in regular communication with the applicant of this scheme for about three years and have had detailed discussions with them through expert topic group meetings.
- 2.2. In broad terms the documents relating to the below-ground archaeology and undesignated heritage assets to be submitted with the DCO application reflect what we have agreed with the applicant and in line with our expectations.
- 2.3. Chiefly though not exclusively these documents consist of.
 - An archaeological desk-based assessment
 - An aerial photographic, LiDAR Data and Historic Map analysis
 - Archaeological geophysical survey report, priority areas
 - Report and assessment of Archaeological and Geoarchaeological Monitoring of site investigation worksWe have no comments on the above documents.

- 2.4. The applicant has largely followed our advice to use windows within the agricultural cycle to carry further geophysical survey prior to and in tandem with the NSIP DCO application process.
- 2.5. It is noted that the Outline Onshore Written Scheme of Investigation (Ref. 9.21) has also been included in the documentation. The Historic environment Services' comments are as follows:
Paragraph 77, third bullet point. The Historic Environment Service has moved away from the use of the term 'strip, map and sample excavations' as this can create the false impression of faster and less rigorous piece of work when compared to a 'set-piece (open-area) excavation'. We would like to see the term 'excavation' used for large scale mitigation taking place both prior to and during the construction programme.

3. **Lead Local Flood Authority**

Comments on Flood Risk Assessment (FRA)

3.1. Informatives:

- The Norfolk Local Flood Risk Management Strategy was updated in 2021 with an addendum.
- The Norfolk Lead Local Flood Authority (LLFA) Statutory Consultee for Planning Guidance Document has been updated in 2022 (currently version 6) to take into account some of the recent National Planning Policy Framework (NPPF) updates and the Climate Change guidance updates.
- The Planning Practice Guidance (PPG) for Flood risk and Coastal Change was updated in August 2022.

These updates are not fully reflected in the FRA such as those in the PPG update. The LLFA has considered the impact these changes could have and has only provided comments relating to the proposed scheme where there is a potential moderate to significant impact.

- 3.2. The FRA based on the Drainage Study identified the two most feasible surface water drainage options were either discharge to the Anglian Water Sewer in Swainsthorpe or to discharge to infiltration. However, no conclusion as to which option was preferred was reached in either the FRA or the Drainage Strategy. The LLFA acknowledges that while neither of these solutions are preferable, the options available at this location are very limited and constrained.
- 3.3. In Plates 2 to 5 (pages 69-72), the LLFA notes the surface water hydraulic modelling results are not consistent with the latest national guidance for climate change allowances. The LLFA requires for this modelling to be updated to incorporate the latest climate change allowances.
- 3.4. In section 18.2.8.1.4, Para 455-456 (pages 72-73) the applicant should ensure staff and users also sign up for Met Office Weather warnings too, as

some areas of surface water flood risk in Norfolk do not coincide with the Environment Agency Flood warning areas.

- 3.5. In section 18.2.8.1.4 (pages 72-73) where a Flood Plan is required, it should be reviewed and agreed with the Relevant Resilience and Emergency Planning teams in accordance with NPPF Para 167.
- 3.6. In the hydraulic modelling report, the hydraulic modelling must be updated for the 1% and 3.3% future scenarios in accordance with the latest climate change allowance guidance.
- 3.7. In relation to the hydraulic modelling, confirmation of either the finished ground level that was used in “Option 1” and “Option 2” for the platform or whether the existing ground levels were proposed to be used as it was not provided in the report.
- 3.8. The LLFA requests clarification in relation to hydraulic modelling of “Option 2 with Embankments” on whether the footprint of the platform was extended to account for the slope of the embankment, along with clarification of the height of the embankments.
- 3.9. The LLFA requires that the applicant provides confirmation of the change in flood risk through a series of figures depicting the areas where a change in maximum flood depth and extent are experienced between the baseline and the post development scenario.

Comments on 9.17 Outline Code of Construction Practice, Section 6

- 3.10. 6.1.8, para 118-119 (pages 33-34) the applicant should ensure that staff and users also sign up for Met Office Weather warnings too as some areas of surface water flood risk in Norfolk do not coincide with the Environment Agency Flood warning areas.
- 3.11. 6.1.8, para 120 (page 34) should a Flood Plan be required, the applicant should ensure that it is reviewed and agreed with the Relevant Resilience and Emergency Planning teams in accordance with NPPF Para 167.

Comments on Appendix 18.2 - Annex 18.2.1: Onshore Substation Drainage Study

- 3.12. The Drainage Study identified the two most feasible options were either discharge to the Anglian Water Sewer in Swainsthorpe or deep bore infiltration. However, no conclusion of which options was preferred was reached in the study.
- 3.13. Further guidance on the information required by the LLFA from applicants can be found at <https://www.norfolk.gov.uk/rubbish-recycling-and-planning/flood-and-water-management/information-for-developers>.

4. Minerals and Waste

- 4.1. Norfolk County Council in its capacity as the Mineral and Waste Planning Authority has been involved in discussions with the proposer of the Sheringham Shoal Extension Project (SEP) and Dudgeon Extension Project (DEP); regarding mineral and waste safeguarding, both of sites and resources. Throughout the project preparation information has been exchanged between the parties regarding these safeguarding issues. The Mineral Planning Authority considers that the Environmental Report for the SEP/DEP correctly assesses the magnitude, sensitivity and significance of the effect of the projects on Mineral Safeguarding Areas within section 17.6.1.4. The further mitigation suggested in section 17.6.1.4.5 is considered likely to be effective. Therefore, Norfolk County Council in its capacity as the Mineral Planning Authority does not object to the proposed SEP/DEP provided that the proposer constructs the cable corridor in the manner set out in the Preliminary Environmental Information Report and continues to work with Norfolk County Council regarding the mitigation of impacts on the Mineral Safeguarding Areas.
- 4.2. The Mineral and Waste Planning Authority will continue ongoing discussions with the applicant as required and will ensure that any future issues are resolved through the Local Impact Report and through the DCO process.

5. Public Health

- 5.1. Public Health's comments are limited to Chapter 28 of the Environmental Statement on health. Public Health has previously discussed the health impact assessment methodology used to assess the impacts of the project on human health with the applicant and welcomes its usage. We believe the assessment methodology for the Health Impact Assessment is appropriate and based on best practice. Public Health agrees that there are unlikely to be any significant, long term adverse health impacts from the proposal compared to baseline conditions.
- 5.2. Public health would like the applicant to include further mitigation measures to address any adverse impacts on mental health, especially given the potential length of construction works. The applicant should increase the involvement of local communities to plan for how disruption of the natural environment and its impacts on mental health can be minimised; how current levels of physical activity can be maintained and improved through provision of information around alternative undisturbed routes on land, how any perceived or real water pollution at sea will be managed; and how information on electromagnetic fields are communicated to the public to reduce the stress, uncertainty, and associated mental health impacts in clear and non-technical ways.
- 5.3. Public Health has the following specific comments:
- There is evidence to suggest that cold related deaths are unlikely to significantly decrease due to a warming climate (<https://ehjournal.biomedcentral.com/articles/10.1186/s12940-017-0323-4>) as stated in paragraph 119

- Paragraph 128 does not consider changing working patterns with increased numbers of people working from home
- Impacts of air quality should include adverse impacts on pregnant women in paragraph 185 as there is evidence that poor air quality adversely impacts birth weight
- Paragraph 186 states the key health outcomes affected by air quality are cardiovascular diseases and asthma. Lung cancer and type 2 diabetes are also key health outcomes related to air quality.
- Any potential contamination of water quality during construction (paragraph 216) may impact physical activity behaviours even if works are conducted out of season
- Health outcomes related to reduced physical activity (paragraph 231) should include type 2 diabetes, unhealthy BMI, stroke and musculoskeletal conditions