

APPENDIX B – EARLY DRAFT LOCAL IMPACT REPORT FOR EA1N AND EA2 WINDFARMS

Please note - Separate Local Impact Reports will be submitted for EA1N and EA2 windfarm projects, however for ease one draft report has been written for both projects at present.

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1. Terms of reference

Introduction

- 1.1. This report comprises the Local Impact Report (LIR) of East Suffolk Council and Suffolk County Council, referred to as “the Councils”. On the 1 April 2019 East Suffolk Council was created by parliamentary order, covering the former districts of Suffolk Coastal District Council and Waveney District Council.
- 1.2. The Councils have had regard to the purpose of LIRs as set out in s60(3) of the Planning Act 2008 (as amended), Department for Communities and Local Government’s (DCLG – now Ministry for Housing Communities and Local Government) Guidance for the examination of applications for development consent and the Planning Inspectorate’s (PINS) Advice Note One: Local Impact Reports, in preparing this LIR.
- 1.3. **ScottishPower Renewables (SPR) has submitted two applications for Development Consent Orders (DCO) East Anglia One North (EA1N) and East Anglia Two (EA2). This LIR relates to xxx, but is almost identical to the LIR of xxx, the only exception being paragraphs xxx in Section xxx.**

Scope

- 1.4. The LIR only relates to onshore impacts of the proposed development as it affects the administrative areas of East Suffolk Council and Suffolk County Council.
- 1.5. The report specifically describes the impact of Works (described in the Development Consent Orders (DCO)); namely:
- 800mw wind farm minimum 36km from shore (Lowestoft) – EA1N;
 - 900mw wind farm minimum 33km from shore (Southwold) – EA2
 - Up to two export cables laid underground landing at Thorpeness and connecting to up to two transition bays for each project;
 - Up to six electrical cables laid underground between the landfall and the substation location north of Friston with associated cable jointing bays for each project;
 - EA1N substation, EA2 substation, National Grid substation and associated grid connection works immediately north of Friston,
 - Temporary construction consolidation sites for each project and;
 - Other onshore construction activities and temporary works associated with the above.

- 1.6. This LIR does not describe the proposed development any further, relying on the promotor's description as set out in DCO application documents.
- 1.7. Only a brief description of the development area is provided to highlight specific features within the onshore Order Limits. The promotor's Environmental Statement (ES) otherwise provides an acceptable description.
- 1.8. The Councils have experience of the DCO process and post consent phases of other windfarm projects. East Anglia One (EA1) windfarm was consented in 2014 and is due to be completed in 2020 and the East Anglia Three (EA3) windfarm which was consented in 2017 but has not yet implemented.
- 1.9. There is no relevant planning history to be described, the Order Limits largely encompass greenfield land other than where it encompasses watercourses, woodlands or the public highway.

Purpose and structure of the LIR

- 1.10. PINS Advice Note One: Local Impact Reports, refers s60 (3) of the 2008 Planning Act which defines the purposed of Local Impact Reports as:

“a report in writing giving details of the likely impact of the proposed development on the authority's area.”
- 1.11. It does this under topic-based headings reflecting the likely nature of the impacts. The key issues for the Councils and the local community are then identified followed by commentary on the extent to which the promotor addresses these issues by reference to the application documentation, including the DCO articles, requirements and obligations, as relevant.

2. Description of the Area

- 2.1. The onshore cable corridor passes through approximately 9km of countryside on its route from the landfall at Thorpeness to the substation site at Friston/Knodishall. The entire onshore Order Limits are within East Suffolk Council's administrative boundaries.
- 2.2. The application proposes the cables to come ashore within the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) and the Heritage Coast at Thorpeness. The cliffs in the area of the landfall comprise weakly cemented Pleistocene rocks and sediments with the coastline suffering from episodic coastal erosion. The landscape is typical of the coastal dunes and shingle ridge character type. Once north of the settlement of Thorpeness the section of the coastline is relatively undeveloped and uncluttered with the Suffolk Coast Path following the coast northwards.
- 2.3. In addition to being within the defined Heritage Coast and AONB national landscape designation, the landfall area also lies partly within the Leiston-Aldeburgh Site of Special Scientific Interest (SSSI).
- 2.4. Once under the unconsolidated cliffs the cables run under Thorpeness Common and part of the Leiston-Aldeburgh SSSI and then head north remaining within the AONB. The cable corridor travels through the flat landscape of the estate sandlands, comprising agricultural land with light sandy soils crossing several hedgerows. The corridor passes between small areas of woodland and runs to the east of the Sandlings Special Protection Area (SPA) and main Leiston-Aldeburgh SSSI which provides important heathland habitat for both flora and fauna. The route also requires the crossing of both a byway open to all traffic, a public right of way (PROW) and a bridleway. Along this coastal stretch the cable corridor passes near a cluster of residential properties.
- 2.5. After approximately 1.5km from the landfall the onshore cable corridor turns to head eastwards requiring the crossing of the Sandlings SPA and Leiston-Aldeburgh SSSI. Once crossed, the route leaves the AONB and travels in a south-westerly direction through agricultural land requiring the crossing of further hedgerows, public footpaths, and bridleways.
- 2.6. The cable corridor crosses Thorpeness Road (B1353) and immediately heads into the Hundred River Valley Special Landscape Area where the landscape character changes crossing the coastal levels character type. The Hundred River is crossed, and the route continues west crossing Aldeburgh Road (B1122) and through a protected woodland

(SCDC/87/00030) to the south of Aldringham Court, a Grade II listed building. At this point the cable corridor runs parallel to Fitches Lane which has occupied residential properties fronting the Lane. The route passes back into the estate sandlands character type leaving the coastal levels.

- 2.7. Once through the woodland, the route crosses PRoWs and continues westwards for approximately 1km leaving the Special Landscape Area passing through agricultural land to the south of Coldfair Green requiring the crossing of hedgerows.
- 2.8. The route continues west crossing Sloe Lane and Snape Road (B1069). After crossing Snape Road, the route heads north-westerly through agricultural land for a further 1.5km until crossing Grove Road to the south of Grove Wood, an ancient woodland. Once across Grove Road the Order Limits open out to form the substations location. The cable route will need to cross further PRoWs (footpath and bridleway) and multiple hedgerows.
- 2.9. In terms of landscape character, the western section of the cable corridor at the substation site and to the east of Grove Road straddles different character areas: the estate sandlands and ancient estate claylands.
- 2.10. The substation location sits immediately to the north of the main settlement of Friston village. Once across Grove Road, the landscape has a more intimate arrangement of fields with hedgerows marking the field boundaries with a more open character towards the northern section of the substations site. The overhead electricity cables transmitting electricity from Sizewell to Bramford pass through the landscape relatively discretely immediately to the north of the proposed substations location. The Order Limits provide a large area either side of the overhead lines for realignment work and National Grid infrastructure.
- 2.11. There is a public footpath which marks the historic parish boundary between Friston and Knodishall running north-south between the village and properties to the north of the Order Limits. There are several residential properties which sit along the boundary of the Order Limits, some of which are Grade II listed. There is also a Grade II* church just to the south of the limits within Friston village.
- 2.12. The woodland of Laurel Covert lies within the Order limits to the north of Friston.

3. Statutory Development Plan

- 3.1. The LIR primarily focuses on local planning policy but in some sections of the report reference is made to the National Planning Policy Framework (NPPF) and the Overarching National Policy Statement for Energy – EN1 (NPS EN-1) where relevant.
- 3.2. The relevant documents that comprise the Development Plan are identified below. Other policy documents which might be considered as material considerations are also identified below.
- 3.3. As previously stated, East Suffolk Council was created on 1 April 2019, joining the former districts of Suffolk Coastal District Council and Waveney District Council. The Local Government (Boundary Changes) Regulations 2018 (part 7) state that any plans, schemes, statements or strategies prepared by the predecessor council should be treated as if it had been prepared and, if so required, published by the successor council - therefore any policy documents referring to “Suffolk Coastal District Council” or “Waveney District Council” continue to apply to East Suffolk Council until such time that a new document is published.

East Suffolk Council Local Plan

- 3.4. The Suffolk Coastal District Local Plan - Core Strategy and Development Management Development Plan Document has been adopted and forms part of the Development Plan relating to the former Suffolk Coastal planning authority area. It was adopted in July 2013. Upon its adoption several the policies within the pre-existing Suffolk Coastal Local Plan were ‘Saved,’ and others were superseded or abandoned.
- 3.5. The Waveney Local Plan was adopted on 20 March 2019 and forms part of the Development Plan relating to the former Waveney local planning authority area.
- 3.6. The relevant Local Plans for the District consists of:
 - East Suffolk Council - Suffolk Coastal District Local Plan – Core Strategy and Development Management Development Plan Document (Adopted July 2013),
 - East Suffolk Council - Waveney Local Plan 2019,
 - East Suffolk Council - Suffolk Coastal District Local Plan – Site Allocations and Site Specific Policies Development Plan Document (Adopted January 2017)
 - The ‘Saved’ Policies of the Suffolk Coastal Local Plan 2006 incorporating the first and second alterations.
 - East Suffolk Council - Suffolk Coastal Local Plan 2019 - Final draft (January 2019)

- 3.7. The relevant policies of the Local Plans will be referred to within this LIR when appropriate.
- 3.8. The new Local Plan (covering the former Suffolk Coastal area) was submitted to the Planning Inspectorate (PINS) for examination on Friday 29 March 2019, the Examination took place between 20 August and the 20 September 2019.
- 3.9. At this stage in the plan making process, the policies that received little objection (or no representations) can be given more weight in decision making if required, as outlined under Paragraph 48 of the NPPF (2019). Modifications to the Local Plan following the Examination are awaited. Policy SCLP3:4 Proposals for Major Energy Infrastructure Projects, has outstanding representations so at this stage the level of weight which can be attributed to this policy is reduced.
- 3.10. Please note all policies starting DM or SP relate to the adopted District Local Plan (2013), all policies starting SCLP relate to the final draft of the new Local Plan (2019) which is not yet adopted.

Suffolk County Council Minerals and Waste Local Plan

- 3.8 The adopted policies of the Minerals and Waste Development Framework are contained within the following documents:
- Suffolk Minerals Core Strategy (Adopted 2008);
 - Suffolk Minerals Site Specific Allocations (Adopted 2009); and
 - Suffolk Waste Core Strategy (Adopted 2011).
- 3.9 The Inspector's Report in respect of the Suffolk Minerals & Waste Local Plan has been received and the Plan is due to be adopted in March 2020. At which point the previous minerals and waste plans will be superseded.

Summary

- 3.10 In summary, the statutory Development Plan for the district is at the time of writing comprised of:
- East Suffolk Council's Suffolk Coastal District Local Plan 2013,
 - East Suffolk Council's Site Allocations and Site Specific Policies Development Plan Document 2017;
 - East Suffolk Council's - Waveney Local Plan 2019,
 - Suffolk Minerals Core Strategy 2008;
 - Suffolk Minerals Site Specific Allocations 2009, and;

- Suffolk Waste Core Strategy 2011.

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4. Other Relevant Local Policy

- 4.1 The Suffolk Shoreline Management Plan (SMP) 7 was published in 2012. The preparation of an SMP is the duty of the operating authorities responsible for managing the coastline. Suffolk Coastal District Council now East Suffolk Council adopted the SMP in November 2011, this document was endorsed by Suffolk County Council.
- 4.2 East Suffolk Business Plan recognises the onshore and offshore energy sector as one of East Suffolk's distinctive economic strengths.
- 4.3 East Suffolk Economic Growth Plan 2018-2023 sets out how East Suffolk Council and its partners will achieve economic growth through maximising the competitive advantage in key sectors such as energy. The plan identifies the opportunities and potential that exists in the energy sector as key to working towards the vision that businesses across East Suffolk have the confidence to invest and grow, creating opportunities for people of all ages and improving further the quality of life in an outstanding environment.
- 4.4 New Anglia Local Enterprise Partnership (NALEP) which covers Norfolk and Suffolk published The Economic Strategy for Norfolk and Suffolk in 2017. The document sets out the ambition for Norfolk and Suffolk to be a centre for the UK's clean energy sector and outlines the plans for future growth identifying the Norfolk and Suffolk coast as an energy coast - a priority place where evidence shows there are significant opportunities and commitments for continued growth.
- 4.5 NALEP is working to develop a Local Industrial Strategy for Norfolk and Suffolk which is currently in draft form. The Local Industrial Strategy is the next stage in the evolution and implementation of the Norfolk and Suffolk Economic Strategy and supports and builds upon this published document.
- 4.6 The AONB Management Plan 2018-2023, has been produced in accordance with the Countryside and Rights of Way Act 2000. It seeks to conserve and enhance the special landscape (and seascape) characteristics of the AONB and ensure that they are taken into account and enhanced by the planning process, with impacts of major infrastructure development avoided, mitigated or offset. It promotes, and recognises the importance of, sustainable recreation and tourism within the AONB and seeks to enhance the understanding of its historic and cultural assets. The Suffolk Heritage Coast is largely contained within the AONB and there are no statutory requirements or powers associated with the Heritage Coast definition.

- 4.7 The AONB - Natural Beauty and Special Qualities Indicators document was published on 20 November 2016. It seeks to establish what constitutes the natural beauty and special qualities of the whole of the AONB. The document follows a rigorous criteria-based approach for establishing and identifying the special qualities of this nationally important landscape.

Summary

- 4.8 There are several additional documents produced and endorsed by the relevant authorities which represent local policy on specific topics, which the Councils consider of relevance to this development.

5. Assessment of Impacts and Adequacy of Response

Introduction

- 5.1. The following sections identify the relevant policies within the Development Plan and other local policy, the key issues raised by the proposed development and the extent to which the submission addresses them and thus the degree of policy compliance.

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6. The Principle of the Development

East Suffolk Council Local Plan

- 6.1. Policy SP12: Climate Change supports development that contributes towards the mitigation of climate change and encourages, among others, renewable energy schemes “where consistent with the need to safeguard residential amenity, the environment and the landscape”.
- 6.2. Policy SCLP3.4: Proposals for Major Energy Infrastructure Projects sets out the matters which the local authority will take into consideration including the nature, scale, extent and potential impact of proposals in addition to the cumulative impacts. The policy seeks to ensure that local benefits and ongoing legacy of development is achieved.
- 6.3. Policy SCLP9.1: Low Carbon & Renewable Energy recognises the need to transition to a low carbon future and supports low carbon and renewable energy developments where they are within a suitable area or satisfy specific criteria which includes consideration of the existing environment and avoiding significant adverse impacts. The policy however primarily focuses on onshore wind turbines as opposed to offshore turbines with onshore infrastructure, but it is of some relevance.
- 6.4. By virtue of the representations received in relation to the above policies contained within the Final Draft Local Plan 2019, only very limited weight can be given to them and therefore the focus of consideration will be on the current Local Plan (2013).

Other Relevant Local Policy

- 6.5. The Suffolk Growth Strategy and emerging New Anglia Plan for Growth provide particular support for offshore wind development based on the likely local economic benefits.
- 6.6. East Suffolk Business Plan recognises the onshore and offshore energy sector as one of East Suffolk’s distinctive economic strengths.

Commentary

- 6.7. The Development Plan, without containing detailed policies specific to the principle of the scheme being proposed (either the cabling or substations), promotes renewable energy schemes more generally.

- 6.8. Policy SP12 recognises the contribution East Suffolk can make towards the generation of renewable energy through wind power and seeks to encourage and promote schemes. The principle of renewable development within the District is therefore supported however the policy makes it clear that this is subject to the consideration of the impacts on residential amenity, the environment and landscape. The explanatory text in relation to the policy also identifies the significant cumulative impacts on the East Suffolk countryside which can result and highlights the importance of grid connection issues not being resolved in a holistic manner.
- 6.9. The broad principle of the development of a wind farm project in East Suffolk is policy compliant however Policy SP12 clearly identifies the need for full consideration of the impacts of any scheme. Consideration of the compliance with the development in relation to specific local plan policies will be discussed in detail in the following sections. Broader support for this development can also be found in the relevant growth strategies and Business Plan for this area.

Adequacy of the application/DCO

- 6.10. The Councils have previously expressed concerns regarding the method of working being proposed by SPR which could result in the first scheme being constructed and land restored prior to the second project commencing, disrupting the same communities and environment again.
- 6.11. DCLG's Guidance on associated development applications for major infrastructure projects notes that one of the core principles that the Secretary of State will take into account in determining whether something is in fact associated development will be whether it supports "the construction or operation of the principal development, or help address its impacts". The guidance therefore allows for the inclusion of infrastructure for a future project under the first as shown by the earlier EA1 (SPR) and EA3 (SPR) schemes. The fact that the EA1N and EA2 projects are proposed by the same promotor, share onshore Order Limits and have been submitted at the same time should only serve to make such coordination easier.
- 6.12. The Councils therefore wish to see SPR commit to an integrated and efficient approach to developing the two wind farm projects in order to lessen the detrimental effects which will be experienced. This issue is discussed further in Section 25 towards the end of this report.
- 6.13. The guidance on associated development also makes it clear that the core principles have been written as not to prevent "associated infrastructure development (such as a network connection) that is on a larger scale than is necessary to serve the principal

development if that associated infrastructure provides capacity that is likely to be required for another proposed major infrastructure project". The Councils are aware that the National Grid substation proposed under this application is being treated as a strategic grid connection location for future major energy infrastructure projects. This is evident by the connection offers made by National Grid which are detailed further in Section 26 of this report. It is therefore not clear why the necessary future expansion of the network connection is not being fully considered. The Councils question whether the current approach taken to associated development is robust.

- 6.14. The DCO is otherwise adequate with respect to the description of the development which it proposes to authorise.

7. Air quality – Emissions and Dust

East Suffolk Council Local Plan

- 7.1. Policy DM23: Residential Amenity, refers to the need to avoid adverse impacts on residential amenity arising from reduced air quality.
- 7.2. Policy SCLP10.3: Environmental Quality, clearly states the expectation that development proposals will protect the quality of the environment and minimise and, where possible, reduce all forms of pollution and contamination including air quality pollution.
- 7.3. Policy SCLP11.2: Residential Amenity, identifies air quality and other forms of pollution as a key consideration the local authority will take into consideration when assessing the impact of development.

Key Local Issues

- 7.4. The main impacts on air quality are those associated with the construction phase and specifically dispersion of materials from the works areas into neighbouring communities and those associated with the emissions from construction vehicles, particularly heavy goods vehicles (HGVs).
- 7.5. The Stratford St Andrew Air Quality Management Area (AQMA) at Long Row, Main Road was declared in June 2014 following monitoring of the air quality in this area of the A12 which showed an exceedance of the annual mean nitrogen dioxide (NO₂) Air Quality Objective (set at 40 µg/m³) at this location. The highest annual mean NO₂ concentrations within the AQMA were 44ug/m³ recorded in 2015. The Air Quality Action Plan, required following declaration of any AQMA, received approval from the Department of Environment, Food and Rural Affairs (DEFRA) in March 2018 and consists of two short term priority action measures and six longer term aspirational measures. The main priority measure, movement of the 30/50mph change of speed limit further south out of the village was undertaken by Suffolk County Council in December 2017. NO₂ concentrations in the AQMA showed a decrease for the first time in 2016 and fell just below the objective in 2017 (39µg/m³), with a further reduction seen in 2018 (38µg/m³). The reduction of 1µg/m³ following movement of the speed limit was lower than modelling had predicted. Speed surveys undertaken following the move have shown a reduction in speeds at all locations surveyed except on the southbound carriageway within the AQMA where speeds appear to have increased slightly. East Suffolk Council are continuing to monitor in this location and the Steering Group will be looking at the aspirational measures within the Action Plan.

- 7.6. Wind blow dust is also a concern locally by virtue of the light sandy soils. The development will result in long stretches of stockpiled topsoil which could be subject to wind whipping. Wind entrainment is commonly seen in the Suffolk Sandlings area and presents a risk to both residential and ecological receptors.

Adequacy of Application/DCO

Scope of Works

- 7.7. The promotor's air quality assessment scope of works only includes the construction phase impacts upon dust nuisance (dust soiling on property and habitats) and air quality concentrations (NO₂, PM₁₀ and PM_{2.5}). The following aspects have been scoped out:
- Dust nuisance generated during the operational phase;
 - Operational phase impact upon air quality concentrations, given the small number of vehicle trips generated;
 - Cumulative impacts of traffic upon air quality concentrations during the operational phase; and
 - The impact of shipping emissions upon local air quality.
- 7.8. The promotor has stated that *'it is not expected that maintenance of the onshore cable route or substation would lead to significant dust generation of fine particulates, as there would be no earthworks or ground disturbance'*. Additional nuisance may occur during the decommissioning phase, but a separate decommissioning assessment is a requirement. It has been demonstrated that scoping out dust nuisance during routine operational maintenance from this air quality assessment is reasonable.
- 7.9. There is no reference to the volumes of surface access traffic generated from port activities within the air quality assessment. Although in Chapter 26 (Traffic and Transport) it is stated that *"facilities would be provided or brought into operation by means of one or more planning applications or as port operations with permitted developments"*. The assessment of shipping emissions and surface access transport on air quality to ports should be secured through a requirement.
- 7.10. There are road improvements at the A12/A1094 junction, A1094/B1069 junction and Marlesford Bridge. Whilst some explanation has been provided for screening these out from assessment for dust nuisance, it does not fully justify screening out an assessment of re-routed traffic during the construction phase. Which is important as substantial works duration, typically those greater than six months, have the

potential to cause a material impact upon local air quality. The promotor's statement in paragraph 20 of Chapter 19 air quality assessment, that these works will not generate more HGV movements than those already assessed is reasonable. Although the impact of rerouted traffic and duration has not been assessed.

Application of Guidance within Assessment

Establishing Study Area

- 7.11. Best practice guidance Design Manual for Roads and Bridges (DMRB) and Institute for Air Quality Management (IAQM)) has been used to identify roads which will experience a change in traffic flow which require a detailed air quality assessment. The promotor's transport consultant has used a Gravity model for the transport assessment, whilst this is acceptable for the transport assessment, this methodology does not capture the effects of varying journey times upon route choice and rerouting. Consequently, there are concerns that air quality impacts of existing traffic rerouted by EA1N and EA2 has not been captured. More specifically, displaced/rerouted vehicles going to/from the A12 along the B1119 and passing through Leiston and Saxmundham have not been assessed.
- 7.12. In addition, the air quality assessment mentions that traffic data has been taken from Chapter 26, Traffic and Transport. However, the peak construction phase annual average daily traffic flows presented within Table 26.23 of Chapter 26 are higher than those presented within Table 19.10 of Chapter 19. The reasonable worst-case traffic flows should be used from the transport assessment, at this point it appears that the project construction phase which generates a smaller volume of vehicles has been used. Using a different scenario's traffic data to identify roads for assessment could alter the study area.

Assumptions for Emission Calculations

- 7.13. The key guidance documents which should be used to develop assumptions for emission calculations are: Local Air Quality Management Technical Guidance 2016 (LAQM.TG (16)) and the IAQM Land Use and Management. These guidance documents have been considered within the promotor's assessment.
- 7.14. The essential assumption inputs for emission calculations are traffic flow, speed and fleet mix. The essential components are the volume % between light (≤ 3.5 tonnes) and heavy (> 3.5 tonnes), with optional extras on fleet mix improving confidence in calculations such as greater granularity in vehicle type with light vehicles being disaggregated into passenger cars, taxis, vans and their associated Euro standards.

- 7.15. 2023 is the assumed year for the air quality assessment. The choice of assessment year should be commended as an older assessment year will result in an older fleet mix with higher emissions assumed. Within IAQM it is stated that the first year of the proposed scheme going live should be assessed, the adopted approach is compliant. In theory, the combination of the earliest possible construction year with conservative emission assumptions and peak construction traffic will result in the most conservative assessment. Although given the mismatch between traffic flows presented within the air quality assessment and transport assessment, it is unclear whether this represents a worst-case assessment.
- 7.16. In the absence of speed data from a traffic model, the use of speeds from a survey and 20km/h for junctions which experience congestion is reasonable. The assumptions of 20km/h is a standard assumption recommended within LAQM.TG (16), therefore speed assumptions are compliant with best practice guidance.

Dispersion Modelling Parameters

- 7.17. The key guidance documents for dispersion modelling are LAQM.TG (16). This has been incorporated within the promotor's assessment.
- 7.18. Initial model verification; the process of comparing estimates with measured concentrations to review the need for model adjustment; showed that it met LAQM.TG (16) requirements. Although, further amendments were undertaken to better reflect heightened concentrations within Stratford St Andrew. To achieve this the promotor has created two model adjustment zones for locations within the Stratford St Andrew AQMA and those outside. This approach is considered acceptable to improve model performance. A years' worth of meteorological data was taken from the Wattisham weather station, it is agreed that this location is representative of the study area.

Air Quality Assessment at Habitats

- 7.19. Not all industry standard guidance has been used within the designated sites assessment. IAQM's Guide on the Assessment of air quality impacts at designated sites went live in June 2019. The promotor has captured relevant ecological receptors within their assessment such as; Leiston-Aldeburgh SSSI, Sizewell C Marshes and Sandlings SPA. With the assessment of nutrient nitrogen impacts from EA1N and EA2 in isolation and cumulatively assessed satisfactorily, impacts upon nutrient nitrogen are insignificant in isolation but require further consideration in the cumulative scenario. Chapter 22 provides a more detailed assessment of the >1% increase in

nutrient nitrogen deposition with satisfactory justification that sensitive habitats distance from emission source would cause insignificant impacts.

- 7.20. However, there are no results which show the estimated NO_x concentrations at ecological receptors. This hinders any conclusions on whether there should be further assessment of acid deposition. In Chapter 22, it is mentioned that neutral grassland is the closest habitat to the affected area of Sizewell Marshes. Given that acid deposition has the potential to impact this habitat, further information needs to be presented to support the current position that air quality will have no adverse impacts upon habitats.

Construction Dust Nuisance

- 7.21. The main guidance document for construction dust nuisance assessment is IAQM's guidance on the assessment of dust from demolition and construction. The assessment follows best practice guidance. This guidance is excellent for most developments' construction programme, but this is a nationally significant infrastructure project where the magnitude of earthworks involved are substantially greater than most projects this guidance is intended for. Consequently, there are concerns that the standard mitigation measures within it would not be commensurate for this project's impacts.
- 7.22. Large impacts within the guidance are defined as those with an earthworks area > 10,000 m², but Table 19.20 of Chapter 19 suggests the project is orders of magnitude greater than IAQM's large threshold. It is considered that construction dust nuisance impacts can be directly mitigated. However, these will need to go beyond standard mitigation measures within the guidance. This is a salient point given the high coastal winds and concerns regarding wind whipping, identified from previous consultations within paragraph 127 of Chapter 19.
- 7.23. The promotor has assessed the construction dust nuisance impact, but there is conflicting information on how soil stockpiles will be dealt with. The Code of Construction Practice (CoCP), for this chapter's purpose, establishes the construction management practices adopted to minimise impacts upon air quality concentrations and dust nuisance. Within chapter 8.1 Outline Code of Construction Practice (OCoCP) it is mentioned that soil stockpiles will be covered, seeded or fenced. Paragraph 127 of Chapter 19 only references seeding stockpiles. Seeding in isolation is not enough. These stockpiles should ideally be turfed, fenced or covered. If seeding is required, stockpiles should be fenced to prevent wind whipping during germination of seed. It would be preferable to have precise mitigation measures within the DCO. Although within paragraph 128 of Chapter 19, the requirement places emphasis upon agreeing

measures with the local authority, it is considered that these dust nuisance impacts can be directly mitigated post-consent through consultation with the Councils.

- 7.24. It is mentioned within the OCoCP document that hard surface haul routes will be implemented. However, it is unclear exactly where the haul routes will be positioned at this stage. Taking this on a worst-case basis and assuming impacts could occur from the onshore works boundary, onshore earthwork sections pass through Leiston-Aldeburgh SSSI and are close to residential areas. Given the level of detail submitted so far there are concerns regarding dust nuisance impacts, however these can also be directly mitigated with the Councils post-consent.
- 7.25. The review, management and reporting duties of the construction dust nuisance will place additional strains upon the Councils Environmental Protection team. In section 19.3.5, the promotor has mentioned they will agree any monitoring locations with the local planning authority (LPA) post-consent. This is satisfactory on the basis that enough funds are set aside to finance monitoring equipment and staff cost for the LPA.

Assessment of Non-Road Mobile Machinery (NRMM) Emissions

- 7.26. There is limited guidance on how to assess NRMM emissions, with LAQM.TG (16) being the main reference document. The inclusion of NRMM within air quality assessment is not prescriptive.
- 7.27. The guidance states '*in the vast majority of cases they will not need to be quantitatively assessed*'. This scheme could require considerably more NRMM than most construction projects and potential impacts should have been quantitatively assessed. Instead, monitoring and action plans for key sensitive receptors to establish if NRMM poses any exceedance risks could be agreed with the Councils within the OCoCP. Specific areas of concern for ecological receptors are the Leiston-Aldeburgh SSSI and for human health, residential areas in the following:
- Thorpeness;
 - Aldringham; and
 - Knodishall Common.

Assessment of Significance

- 7.28. The promotor has assessed the scheme impacts against the following guidance:
- NPS EN-1 (Department of Energy and Climate Change (DECC) 2011a); and
 - IAQM, Land-use Planning and Development Control: Planning for air quality.

- 7.29. The guidance for NPS EN-1 and IAQM has been fully incorporated within this assessment. It should be noted that conclusions of significance are not prescriptive within IAQM's guidance, instead they are based upon professional judgement.
- 7.30. Concentration of PM₁₀ and PM_{2.5} from vehicular emissions are substantially below the air quality objectives, which is expected from this modelling study. Without particulate monitoring within Suffolk we are unable to establish if modelled concentrations are reasonable. However, funding towards PM₁₀ and PM_{2.5} monitoring for dust nuisance impacts will also facilitate validation of these particulate concentration estimates. Consequently, these discussions will focus around NO₂.
- 7.31. Table 19.24 within Chapter 19 estimates concentrations of 29.08 µg/m³ with only one project's contributions to NO₂ concentrations. These concentrations seem very low, especially when compared to concentrations within Appendix 19.2, Table A19.6. Estimated concentrations at R1 are 10.36 µg/m³ less with only one project's contributions compared to those with both EA1N and EA2. Instead the Councils interpretation of impacts is based upon results within Appendix 19.2.
- 7.32. It is unclear if the cumulative impact assessment of EA1N and EA2 of scenario 1 (simultaneous construction) includes both schemes' peak construction traffic contribution within the assessment. In paragraph 175, it is stated that *'it is not anticipated that additional traffic associated with Sizewell C New Nuclear Power Station would result in an exceedance of the air quality Objectives'*. However, estimated concentrations within Table A19.6 of Appendix 19.2 at R1 (within Stratford St Andrew) are 39.4 µg/m³, only 1.1 µg/m³ below an exceedance of the annual mean NO₂ air quality objective. This is not sufficient headroom to accommodate cumulative schemes such as Sizewell B relocated facilities proposals and Sizewell C Early Year's contribution to NO₂, if these applications are successful (Planning consent for Sizewell B to relocate facilities was granted on 13 November 2019 East Suffolk Council reference: DC/19/1637FUL). Whilst EA1N and EA2 are not exclusively responsible for the risk in achieving air quality objectives, the contribution of EA1N/EA2 to the cumulative effect of Sizewell B and Sizewell C construction traffic is a significant aspect of the risk.
- 7.33. Should EDF Energy's Sizewell C DCO application be successful, cumulative construction traffic impacts from EA1N/EA2 and Sizewell C pose a risk to achieving the NO₂ annual mean air quality objective within the Stratford St Andrew AQMA. This risk can be managed through monitoring of NO₂ concentrations within the AQMA and collaboration between the Councils, Nuclear New Builds (NNB (subsidiary of EDF Energy)) and SPR, a monitoring group could review concentrations and manage construction traffic in an attempt to prevent air quality objective exceedances. This

construction collaboration group should be secured through a requirement. The risk of exceedance is supported with the emission sensitivity test in appendix 19.4. This assumes no improvement in emissions will occur between 2018 and 2023.

- 7.34. Risks associated with schemes operating concurrently, could be exacerbated by any delays to the two-village bypass which is key in bypassing vehicles from the AQMA for Sizewell C. It is therefore essential that funding is set aside by the promotor and EDF Energy to finance operation of a continuous analyser within the AQMA to get early warnings of exceedance risks and to coordinate with SPR/EDF Energy to reduce emissions within the AQMA.
- 7.35. It is proposed that EA1N and EA2's contribution to NO_x from construction vehicles will be reduced with the requirement that all vehicles will be Euro VI standard compliant. This is a commendable commitment by the promotor. There are concerns that these Euro standard ambitions will not be realised. The Oxford Brookes' study into Euro standards found that only 47% of HGVs achieved the target Euro standard (Impacts Assessment Unit, Oxford Brookes, 2019). Consequently, Euro VI standard for vehicles should be secured through a DCO requirement with sufficient contractual obligations put in place by SPR to enforce this standard across all tiers of contractors.
- 7.36. A key concern of the Councils is additional vehicles within this AQMA have the same emissions behaviour, that is a greater engine load from acceleration along the southbound lane with high emissions will be adopted by new vehicles. It is therefore crucial that funding is put aside to finance East Suffolk Council's efforts in achieving low emission driving behaviour through the AQMA.

Summary

- 7.37. Shipping emissions have been screened out from the air quality assessment. Instead Chapter 26 (Traffic and Transport) referenced separate planning applications or permitted development for port activity, consequently more detailed assessment of shipping emissions and impacts of ports' surface access upon air quality should be secured through a requirement. The transport chapter have also requested further assessment of surface access transport from port activities.
- 7.38. Construction dust nuisance impacts have been assessed with best practice guidance. However, this scheme has much greater nuisance potential than the schemes this guidance is intended for. Additional information should be presented within the mitigation section for a scheme of this scale. However, on the basis that funding is set aside for equipment and time to monitor construction and that the OCoCP is agreed with the Council post-consent, these impacts can be mitigated.

- 7.39. The estimated concentrations from one project presented in isolation seem surprisingly low, instead estimated concentrations within Appendix 19.2 have been used to reach conclusions on the risk of exceeding air quality objectives. Using these results mean construction of either one project only, or EA1N/EA2 simultaneously, poses an exceedance risk with the cumulative effects of Sizewell B and Sizewell C early years traffic.
- 7.40. Should EDF Energy's Sizewell C DCO application be successful, cumulative construction traffic impacts from EA1N/EA2 and Sizewell C pose a risk to achieving the NO₂ annual mean air quality objective within the Stratford St Andrew AQMA. This risk can be managed through monitoring of NO₂ concentrations within the AQMA and collaboration between the Councils, Nuclear New Builds (NNB (subsidiary of EDF Energy)) and SPR, a monitoring group could review concentrations and manage construction traffic in an attempt to prevent air quality objective exceedances. A requirement is recommended to ensure a monitoring group proactively manages construction traffic to minimise exceedance risks.
- 7.41. Other requirements and funding are required for more effective enforcement of Euro VI standards within construction vehicles and low emission driving behaviour to minimise the risk of NO₂ annual mean exceedance within Stratford St Andrew.

Compliance with Local Policy

- 7.42. The assessment has mostly been undertaken in accordance with best practice guidance. Relevant local policies have been considered within the assessment. With reference to Policies DM23 and SCLP10.3, the promotor's assessment shows that there is a risk of adverse impacts to residential amenity and environmental quality. However, additional information to demonstrate that adverse impacts have been completely mitigated and managed is required. Until we have that detail the proposals are not considered to be compliant with local policy.

8. External Lighting

East Suffolk Local Plan Policies

- 8.1. Policy DM23: Residential Amenity, refers to the need to avoid adverse impacts on residential amenity arising from light pollution.
- 8.2. Policy SCLP10.3: Environmental Quality, clearly states the expectation that development proposals will protect the quality of the environment and minimise and, where possible, reduce all forms of pollution and contamination including light pollution.
- 8.3. Policy SCLP10.4: Landscape Character, states that development should protect and enhance the tranquillity and dark skies across the District. Highlighting that exterior lighting in development should be appropriate and sensitive to protecting the intrinsic darkness of rural and tranquil estuary, heathland and river valley landscape character.

Key Local Issues

- 8.4. The onshore cable corridor is routed through rural areas which benefit from dark skies with little intrusion from light sources. Any lighting during construction and at the substation during both construction and operation has the potential to cause light pollution and appear intrusive in this rural dark locality.

Adequacy of Application/DCO

- 8.5. Within Chapter 6 it is stated that no 24-hour lighting is anticipated along the length of the cable route except associated with any Horizontal Directional Drilling (HDD) operations and security lighting at the Construction Consolidation Sites (CCS). Requirement 22 of the DCO which secures the CoCP stipulates that the document must include an artificial light emissions plan. The OCoCP states that the management plan will detail appropriate management and mitigation measures. The documents detail how the lighting will be carefully designed to avoid or minimise impact on both human and ecological receptors.
- 8.6. Chapter 6 identifies a need for security lighting around the perimeter fence of the substation compounds in addition to car park lighting. This lighting is identified to potentially be motion sensitive. The submission makes it clear that no additional lighting will be proposed along Grove Road or along the access roads within the substation location. Requirement 25 of the DCO controls artificial lighting during the

operational phase of the development by securing the submission of an artificial light emissions management plan in relation to the project substation or National Grid substation prior to their operation.

Compliance with Local Policy

- 8.7. Subject to the artificial lighting schemes for both the construction phase and operational phase of the development being detailed appropriately, the proposals would be compliant with local policy. It will however be crucial that the lighting schemes recognise the rural nature of the site and the existing limited intrusion from external lighting.

9. Ecology and Ornithology

East Suffolk Local Plan Policies

- 9.1. Policy DM27: Biodiversity and Geodiversity, requires protection and enhancement of habitats and their biodiversity value. Adverse impacts on protected/priority species will not be permitted unless adequate mitigation and/or compensation is provided. There is emphasis on minimising habitat fragmentation and maximising opportunities for habitat connectivity.
- 9.2. Policy SCLP10.1: Biodiversity and Geodiversity, states that development will be supported where it can be demonstrated that it maintains, restores or enhances the existing green infrastructure network and positively contributes towards biodiversity and/or geodiversity. Proposals which result in direct or indirect adverse impact alone or in combination with other projects, on locally designated sites, will not be supported unless it can be demonstrated that the benefits of the proposal outweigh the biodiversity loss. The policy also makes it clear that new development should provide environmental net gains in terms of both green infrastructure and biodiversity. Development with the potential to affect a European designated site must be supported by sufficient information to enable a Habitat Regulations Assessment (HRA) to be undertaken.

Other Relevant Local Policy

- 9.3. The Suffolk Coast and Heaths AONB Management Plan 2018-2023 sets out the intention to conserve and enhance the landscape including biodiversity, noting the specific importance of habitat connectivity in responding to climate change.

Key Local Issues

- 9.4. The proposed development has the potential to result in a range of adverse impacts on a number of ecological receptors, including sites of international nature conservation importance; sites of national conservation importance; protected species and species and habitats of UK conservation priority (species and habitats identified as UK Priority under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006)). Designated sites which the development interacts with and which are of particular importance are the Sandlings SPA (site of international importance); Leiston-Aldeburgh SSSI (site of national importance) and Grove Wood County Wildlife Site (CWS) (site of at least county importance). Several UK Priority habitats will be affected, including hedgerows, lowland mixed deciduous woodland, rivers and coastal vegetated shingle. A number of protected and/or UK

Priority species are also likely to be affected, including bats (protected species; some UK Priority species; all Suffolk Priority species); great crested newts (protected species; UK Priority species); breeding birds (protected species; some UK Priority species); reptiles (protected species; UK Priority species) and badgers (protected species). There is also the potential that migratory species, such as wildfowl, waders and bats, may be impacted by the operation of the turbines.

9.5. The following construction elements of the development have the potential to impact on the ecological receptors identified above:

- Landfall – damage to, and disturbance of, Leiston-Aldeburgh SSSI as a result of HDD;
- Cable route – disturbance of Sandlings SPA/Leiston-Aldeburgh SSSI due to construction proximity;
- Cable route – damage to, and disturbance of, Sandlings SPA-Leiston-Aldeburgh SSSI during construction (where cable route crosses designated sites);
- Cable route and substations – loss of hedgerows and trees during construction. Impacts on bat roosting; foraging and commuting habitats; great crested newt habitats; reptile habitats; breeding bird habitats and badger habitats (including setts).
- Cable route and substations – loss of woodland and trees during construction. Impacts on bat roosting; foraging and commuting habitats; great crested newt habitats; reptile habitats; breeding bird habitats and badger habitats (including setts).
- Cable route and highways improvements – damage to, and disturbance of, watercourse during construction. Impacts on bat foraging and commuting habitats; great crested newt habitats; reptile habitats; breeding bird habitats; badger habitats; otter and water vole habitats and eels.

9.6. The following operational elements of the development have the potential to impact on the ecological receptors identified above:

- Substation noise – disturbance of protected and/or UK Priority species (particularly bats) due to operational noise of the proposed substations.
- Migratory species – turbines could result in killing or injury of migratory species such as wildfowl, waders and some bat species.
- Whole project Biodiversity Net Gain – in all developments the Councils seek the delivery of Biodiversity Net Gain and are disappointed to see that little is proposed as part of this development.

Adequacy of Application/DCO

- 9.7. Subject to the comments above, whilst it is considered that the ES Chapters 22 (Onshore Ecology) and 23 (Onshore Ornithology) adequately assess and provide mitigation/compensation measures for County Wildlife Sites; watercourses; great crested newts; reptiles; non-SPA/SSSI breeding birds and badgers, the following ecological receptors are either not considered to have been fully assessed or have insufficient mitigation/compensation measures identified within the ES and secured within the draft DCO:

Cable route (construction) crossing the Sandlings SPA/Leiston-Aldeburgh SSSI

- 9.8. The ES (Chapters 22 and 23) identifies two potential techniques for use where the cable route crosses the Sandlings SPA and Leiston-Aldeburgh SSSI, to the south of Sizewell Gap. Either open cut trenching or HDD are proposed for use. Whilst it appears that open cut trenching is the promotor's preferred method (ES Chapter 22, Table 22.4), neither technique is definitively selected. Whilst both have the potential for adverse impacts on the designated sites, based on the information available the Councils would at present support the proposed open cut trenching method as the preferred option as it is considered that on balance this will result in the least adverse ecological impact due to the reduced working time (decreasing likely disturbance impacts), minimised working width and potential to reinstate any habitats impacted upon. Open cut would also appear likely to result less disturbance impacts in the surrounding area compared with HDD. This is subject to an acceptable method statement for this part of the construction being agreed by Natural England, the Council and other relevant stakeholders.

Cable route and substations (construction) impacts on bats

- 9.9. The ES Chapter 22 identifies that the loss of habitat suitable for bat foraging and commuting (primarily hedgerows and areas of woodland) would result in a "moderate adverse" impact on this receptor in the "short term" after mitigation measures have been applied (22.6.1.9.3). The Councils have significant concerns about the magnitude of this residual impact and are disappointed that additional measures have not been investigated to address it.
- 9.10. The Councils are also concerned that the length of the impact has been under assessed. If the proposed replacement planting does not proceed as planned or does not develop as quickly as anticipated (see our comments in Section 15 on landscaping for further information on our concerns about this) a minimum of a "medium term" impact will occur. This could then lead to impacts on local bat populations as the

length of the works and lack of mitigation/compensation will have potentially resulted in less food availability (e.g. by severance of connections to feeding areas) which in turn will result in poorer breeding success and population declines.

- 9.11. There is an assumption that destroyed, damaged or disturbed hedgerows will be ecologically functioning features again in a period of three to seven years from the start of construction. This is considered to be optimistic and is dependent on good growing conditions being experienced in all years. Given the varying “quality” of growing seasons experienced in Suffolk in recent years a longer period to achieve ecological functionality may be experienced.
- 9.12. Finally, survey work has identified the apparent presence of lesser horseshoe bat (*Rhinolophus hipposideros*) (a European Protected Species listed on Annex II and Annex IV of the Habitats Directive). This species has never been recorded in East Suffolk, with the only known record being from the west of the County, with its UK range being largely restricted to the south-west. Given the recording of this species (alongside a suite of other bat species including barbastelle (*Barbastella barbastellus*) which is also listed on Annex II and Annex IV of the Habitats Directive) it is essential that adequate mitigation and compensation measures are delivered.

Cable route and substations (construction) impacts on hedgerows

- 9.13. In addition to the above comments on bats, the ES concludes that impacts on hedgerows (a UK Priority habitat) is “Minor Adverse” subject to the proposed mitigation measures being implemented (22.6.1.5.2). As set out in the Councils comments on landscape, we have significant concerns about the likely speed and success of the planting mitigation proposed. There is therefore the potential that the identified effect could be present over a greater length of time and therefore be greater than that predicted.
- 9.14. We also note that the ES chapter only references that hedgerow mitigation plans will be agreed with Natural England; however, we welcome the commitment in the draft DCO that such plans will also be agreed with East Suffolk Council.

Cable route and substations (construction) impacts on woodland and trees

- 9.15. The ES concludes that with the proposed mitigation impacts on woodland and trees will be reduced to a temporary residual “Minor Adverse” (22.6.1.4.3). However, as set out in the Councils comments in Section 15 on landscape we have concerns about the growth rates proposed. If the proposed growth rates are not achieved then the ecological functionality of the replacement planting will take longer to be achieved

and therefore the identified residual impact will be in effect for longer, thus potentially increasing it from “Minor Adverse”.

- 9.16. Also, as with hedgerows, we note that the ES chapter only references that woodland and tree mitigation plans will be agreed with Natural England, however we welcome the commitment in the draft DCO that such plans will also be agreed with East Suffolk Council. Further, it is proposed that only “...at least an equivalent area of lost woodland is replanted...” (22.6.1.4 190). Whilst this will provide compensation at a spatial scale, it will not necessarily deliver an equivalent quality of habitat, nor will it allow for the decline in habitat quality which will be experienced whilst new planting matures.

Air quality (construction)

- 9.17. As set out in our comments in the Air Quality section of this report, whilst impacts from nitrogen deposition on designated sites are assessed, it is not clear that impacts from acid deposition arising from NO_x emissions have been fully assessed. Habitats within nearby designated sites (including Sizewell Marshes SSSI) are potentially vulnerable to acid deposition. Further information is therefore required to demonstrate that there will be no adverse impacts on habitats within designated sites.

Substation noise (operation)

- 9.18. The ES chapter concludes that operational noise will at worst result in a “Minor Adverse” ecological impact (22.6.2.2 251). However, this appears to be based on assessment undertaken in relation to human noise receptors. Whilst we have a number of concerns in relation to the assessment of impacts on human noise receptors (please see comments within Section 19 Noise and Vibrations), using the results of assessment for impacts on human receptors is not directly comparable as high frequency noise is not directly assessed. This has significant ramifications for a range of ecological receptors, particularly bats (protected species; some UK Priority Species) which rely on echolocation (using high frequencies) for foraging, commuting and socialising.

Whole project Biodiversity Net Gain

- 9.19. The Councils are disappointed that little in the way of Biodiversity Net Gain is proposed as part of the development. Policy SCLP10.1 seeks to ensure new development secures ecological enhancements as part of its design and

implementation and should provide a biodiversity net gain that is proportionate to the scale and nature of the proposal.

Pre-commencement surveys

- 9.20. The Outline Landscape and Ecological Management Strategy (OLEMS) recognises the need for further pre-commencement surveys, however we do not consider that the need for these is adequately reflected in the wording of the draft DCO. DCO Requirement 21 should specifically reference the need for pre-commencement surveys prior to the commencement of any of the onshore works (including site preparation works).

Cumulative Impacts

- 9.21. The Councils agree that, in relation to cumulative impact, Scenario 2 is likely to result in greatest ecological harm (ES Volume 3, Appendix 22.2).

Compliance with Local Policy

- 9.22. A number of ecological receptors have been identified above which the Councils consider the promotor has either not fully assessed or proposed insufficient mitigation measures to address the impacts contrary to the requirements of local policy. The lack of commitment to biodiversity net gain also conflicts with emerging local policy.

10. Coastal change

East Suffolk Council Local Plan Policies

- 10.1. Policy SP30: Coastal Zone, seeks an integrated approach to considering development on the coast having regard to the adopted Strategic Flood Risk Assessment, the SMP and any Estuarine Plans endorsed by the District Council.
- 10.2. Policy SCLP9.3: Coastal Change Management Areas, seeks to highlight areas where the rates of shoreline change are significant over the next 100 years. Although there is a presumption against some forms of development, essential infrastructure will be permitted where no other sites outside the area are feasible and there is a management plan in place to manage the impact of coastal change including their future removal and replacement. The point at which the offshore cables come ashore lies within a Coastal Change Management Area.

Other Relevant Local Policy

- 10.3. The landfall zone is within Policy Development Zone 4 (Dunwich to Thorpeness) of the SMP 7. It spans 2 Management Units (MU) MIN 13.2 and MIN13.3. The policy statements for each are shown in the table below.

SMP MU	1 st epoch until 2025	2 nd epoch 2025-2055	3 rd epoch 2055-2105
MIN 13.2	No Active Intervention	No Active Intervention	No Active Intervention
MIN 13.3	Managed Realignment with the current alignment maintained at existing defences.	Managed Realignment with review of maintaining the current alignment at existing defences.	Managed Realignment

- 10.4. In MU MIN 13.3 the intent to 'manage realignment' applies only to the currently defended part of the frontage below property in North End Avenue that is outside the landfall zone. There is no intention to actively manage the part of MU MIN 13.3 north of the existing defences that is within the landfall zone.
- 10.5. The policy headlines above provide brief summaries of the underlying Intent for Management for sections of coastline which are described in detail in the SMP documents. Over this locality the underlying policy objective is to manage the coast in a fashion that maintains a process of long-term natural change and for the built environment to adapt to that change. This Intent for Management is a key guiding principle that is reflected in the Council's issues and objectives that follow.

Key local issues

Coralline Crag Outcrop

- 10.6. It is important to ensure that the permanent installation and temporary works required to both install and maintain the cable landing, do not cause a significant negative impact on coastal processes. The main point of concern is the potential for significant damage to be caused to the exposed coralline crag outcrop located in the nearshore area between Thorpeness and Sizewell that has an important role in stabilising the coastline over the Thorpeness to Dunwich frontage.

Exposure of Structures

- 10.7. The proposed structures (ducts, cables and buildings) required to be installed at or close to the shoreline (defined here as cliff top to Mean Low Water Mark) must be designed with a full understanding of the consequences of coastal change. It is important to ensure the proposed structures are not exposed by coastal change within their predicted service life, with an allowance for risk if the service life is extended.

Destabilisation of Cliff

- 10.8. It is important that the cable and duct installation methods minimise disturbance to the shoreline. The objective is to encourage the use of HDD as opposed to open cut trenching. A further concern is the potential for HDD to cause vibration that destabilises the cliff face that it passes under. The local community has also raised questions and concerns regarding the potential impacts of the cable landing site linked to its location close to the northern extent of Thorpeness village. The Thorpeness frontage has suffered significant coastal erosion pressure over recent years. The community are similarly concerned regarding the drilling under the currently near-vertical and unstable Thorpeness cliff will cause vibration leading to increased cliff erosion and the fact the cable landing infrastructure in this location will be at risk from coastal erosion.

Cumulative Impacts

- 10.9. It must be ensured that the site-specific and cumulative effect of the offshore windfarm array on coastal processes does not create a significant negative impact at the shoreline.

Adequacy of application/DCO

Coralline Crag

- 10.10. The Council's concerns in relation to the project's interaction with the coralline crag outcrop were addressed by SPR in a report that assessed several potential cable landing locations. The report concluded that the landing site should be at the southern extent of the coastal frontage within which it is allowed, which will avoid, or minimise to an acceptably low level, any negative impact on the crag outcrop notably from open cut trenching.
- 10.11. This has been agreed in principle by the promotor however the final cable HDD line, break out location and transition bay location is subject to the outcome of a further site investigation of the plan extent of, and thickness of sand coverage over, the southern coralline crag outcrop. The final plan position of the HDD line and breakout point and transition bay locations are to be agreed with East Suffolk Council based upon data from further site investigation. There is however no specific reference to this within the requirements.
- 10.12. In order to address this, it is recommended that additional text is required, or the existing text is expanded to include a requirement for the promotor to consult with East Suffolk Council on design after further investigation is carried out and for East Suffolk Council to approve the final design proposal.

Exposure and Decommissioning of Structures

- 10.13. The Councils' concerns regarding the potential exposure of the proposed structures installed close to the shoreline were partly addressed by SPR in a report that assessed potential future coastal change scenarios. This has been used to identify a sustainable location for the transition bay building and will be used to design the duct installation profile. An outstanding task is for SPR to present a final design profile for the cable duct and transition bay installation that demonstrates compliance with this objective. This is linked to the recommendation set out in the previous paragraph.
- 10.14. The final design profile for the cable duct is to be agreed with East Suffolk Council to demonstrate that when installed, the infrastructure is not at risk of exposure from coastal change within the predicted service life. This must take account of tolerances in HDD techniques. This will follow on from action for further site investigation described the section on the coralline crag above.

- 10.15. A further recommendation is that the proposed structures (excluding ducts) are removed at the end of the landfall site design life (25 years following completion of construction), and that any proposed extension of the design life beyond 25 years is subject to a new erosion risk assessment and there being evidence of no significant negative impact of such an extension on coastal processes. To achieve these objectives an amendment to Requirement 30-(1) Onshore Commissioning is required to include Work nr 8 and (b) a requirement for the developer to consider the risk of erosion to the Landfall structures if there is request to extend the operational life beyond 25 years. This is secured by Requirement 37-(1) Decommissioning of Work nr 8.

Destabilisation of Cliff

- 10.16. HDD has been agreed by SPR as the preferred method of duct installation at the landfall. The promotor's approach to management of vibration risk to the cliff stability is not yet agreed. The HDD shall be designed and managed to ensure the risk to cliff stability from vibration, or other cause linked to HDD, is as low as reasonably practical. Requirement 22 makes general reference to vibration management requiring a construction phase noise and vibration management plan as part of the CoCP, but more specific text is required to ensure the issue in relation to vibrations and the stability of the cliffs is addressed.

Cumulative Impacts

- 10.17. The Councils are satisfied the site-specific and cumulative effect of the offshore windfarm array on coastal processes has been adequately addressed by SPR studies that demonstrate the worst-case potential change scenario is unlikely to produce a significant negative impact.
- 10.18. The Councils believe that the risk of a cumulative impact will increase as the number and extent of windfarms in the North Sea increases and recommends the assumption of no significant negative impact be kept under review as part of a post-installation strategic windfarm impact monitoring programme.

Summary

- 10.19. When measured against the overarching policy objectives for Coastal Change management the potential impacts of the current development are negative to neutral in that they may alter natural change. There are no positive impacts. The scale and significance of the potential negative impacts varies from low to negligible when put into context of the potential for variability in natural environmental change.

11. Flood Risk

East Suffolk Local Plan Policies

- 11.1. Policy DM28: Flood Risk, states that development is not permitted in flood zones 2 and 3 unless relevant tests in the Technical Guidance to the NPPF have been complied with. This includes the sequential test, exceptions test (as necessary) and site-specific flood risk assessment.
- 11.2. Policy SCLP9.5: Flood Risk, states proposals for new development will not be permitted in areas at high risk from flooding, i.e. Flood Zones 2 and 3, unless the applicant has satisfied the safety requirements in the Flood Risk National Planning Policy Guidance (NPPG). The policy emphasises that developments should exhibit the three main principles of flood risk, in that, they should be safe, resilient and should not increase flood risk elsewhere.
- 11.3. Policy SCLP9.6: Sustainable Drainage Systems (SuDS), requires this development to utilise sustainable drainage systems which should be integrated into the landscaping scheme, contribute to the design quality of the scheme and deliver sufficient and appropriate water quality and aquatic biodiversity improvements, wherever possible. The policy states runoff rates should be restricted to greenfield runoff rates wherever possible.

Other Relevant Local Policy

- 11.4. The Suffolk Flood Risk Management Strategy (SFRMS) sets out guiding principles on tackling flooding and integrates the issue of flooding from surface water runoff and from ordinary watercourses. One of the key objectives is to prevent an increase in flooding as a result of new development by ensuring SuDS are properly considered and incorporated into works. The document notes the importance of aligning with the content of SMPs and River Basin Management Plans to ensure a holistic approach is taken to flood and coastal management and water quality. Appendix A of the Strategy is a local SuDS guide.
- 11.5. SFRMS Objective 3 states *“Ensure that planning decisions are based on up-to-date information about all flood risks”*.

Key Local Issues

Surface water flooding in Friston

- 11.6. A key issue for the Councils and communities relates to the cable corridor, substations site and implications for flood risk in the locality. Friston village has been subject to surface water flooding on several occasions, most recently on 6 October 2019 when water internally flooded a number of properties, with one property being internally flooded on a second occasion, 21 October 2019. An up to date Flood Incident Map for Friston is provided in Plan A which can be found at the end of this section of the report.
- 11.7. Suffolk County Council as Lead Local Flood Authority (LLFA) are currently conducting two Section 19 Investigations in Friston under the Flood & Water Management Act 2010;
- Multiple properties flooded internally on 06/10/2019.
 - Single property flooded on multiple occasions.
- 11.8. Rainfall data from nearby Thorpeness identified the event on 6 October 2019 as a 1 in 40-year rainfall event.
- 11.9. Evidence suggests recent surface water flooding originated from farmland to the west, east and north east of Friston, an area through which the cable corridor is proposed to pass. The surface water flooding was heavily laden with silt from these fields. Surface water flooding is not thought to have originated from the proposed substation site on this event.
- 11.10. Existing Environment Agency (EA) National Mapping for surface water flood risk (Figure 1) is not representative of the surface water flow paths which resulted in the internal flooding of properties in October 2019, as above. The properties affected are shown at low surface water flood risk (1 in 1000). Plan B illustrates the flow paths observed on 6 October 2019 which can be found at the end of this section of the report.
- 11.11. There is the potential for the proposed development to interact with an unidentified surface water flow path. In this instance, the construction drainage may not be sufficiently sized to manage the unknown volume of water within the red line boundary. As such, this could result in an increase in offsite flood risk and an increase in the volume of sediment contained within surface water flood flows.

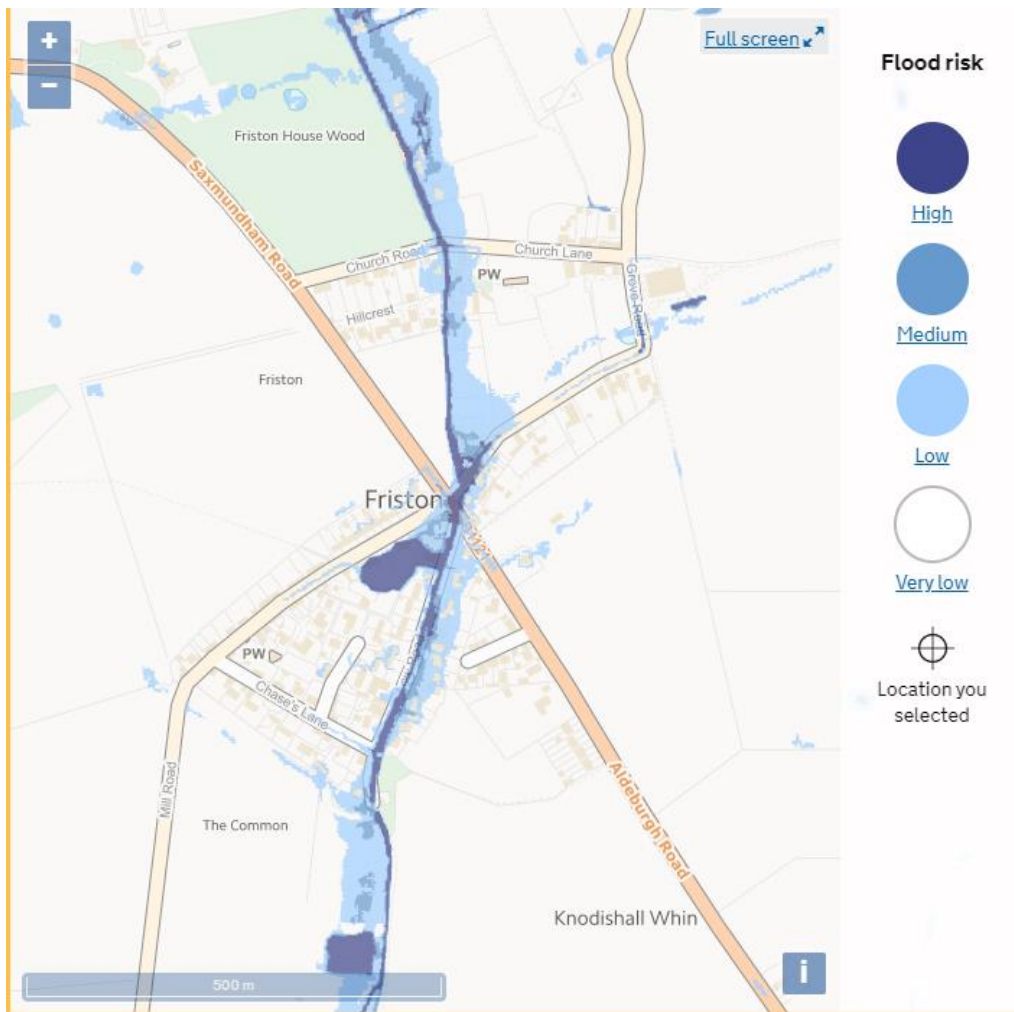


Figure 1 – Environment Agency National Mapping, Surface Water Flood Risk, Friston

- 11.12. EA National Mapping, shown in Figure 2, identifies the surface water flood risk in Friston originating to the north of the village, in the area proposed to be occupied by the National Grid substation.
- 11.13. The promotor proposes a SuDS pond to intercept this flow path, attenuate and release at a reduced rate. This would reduce surface water flood risk in Friston. However, it is unclear how this significant flow path would be managed during construction. The area required to attenuate it would be significant. Unless the SuDS pond is established prior to construction, this flow path could interact with construction activities and increase the amount of sediment mobilised and transported downstream.
- 11.14. Suffolk County Council are in the process of developing a Surface Water Management Plan (SWMP) for the catchment of Friston village. This will include a detailed assessment of the catchment topography and characteristics to accurately model

surface water flow paths which can in turn be compared against evidence from recent surface water flooding to increase confidence in the SWMP.

- 11.15. Friston village is part of the Friston Watercourse Catchment. However, it is in the upper reaches of the catchment. Thus, due to the local topography, the proposed development impacts on Friston are far more concentrated in Friston village than the impacts downstream where the entire contributing catchment of 6km² is considered. As an estimate Friston village has a contributing catchment of approx. 3km² with the catchment of the open section of Main River in Friston being even less than this.
- 11.16. CCSs are proposed within the Friston Catchment. The promotor's submission states these will not have their own SuDS ponds. It is therefore unclear if the proposal is not to drain these sites, which would result in an increase in surface water flood risk to Friston, or if they will drain into the strategic surface water drainage system.
- 11.17. Due to the nature of the works there is a risk of ground water flooding in areas of excavation, specific areas of concerns are around Coldfair Green and Aldringham.

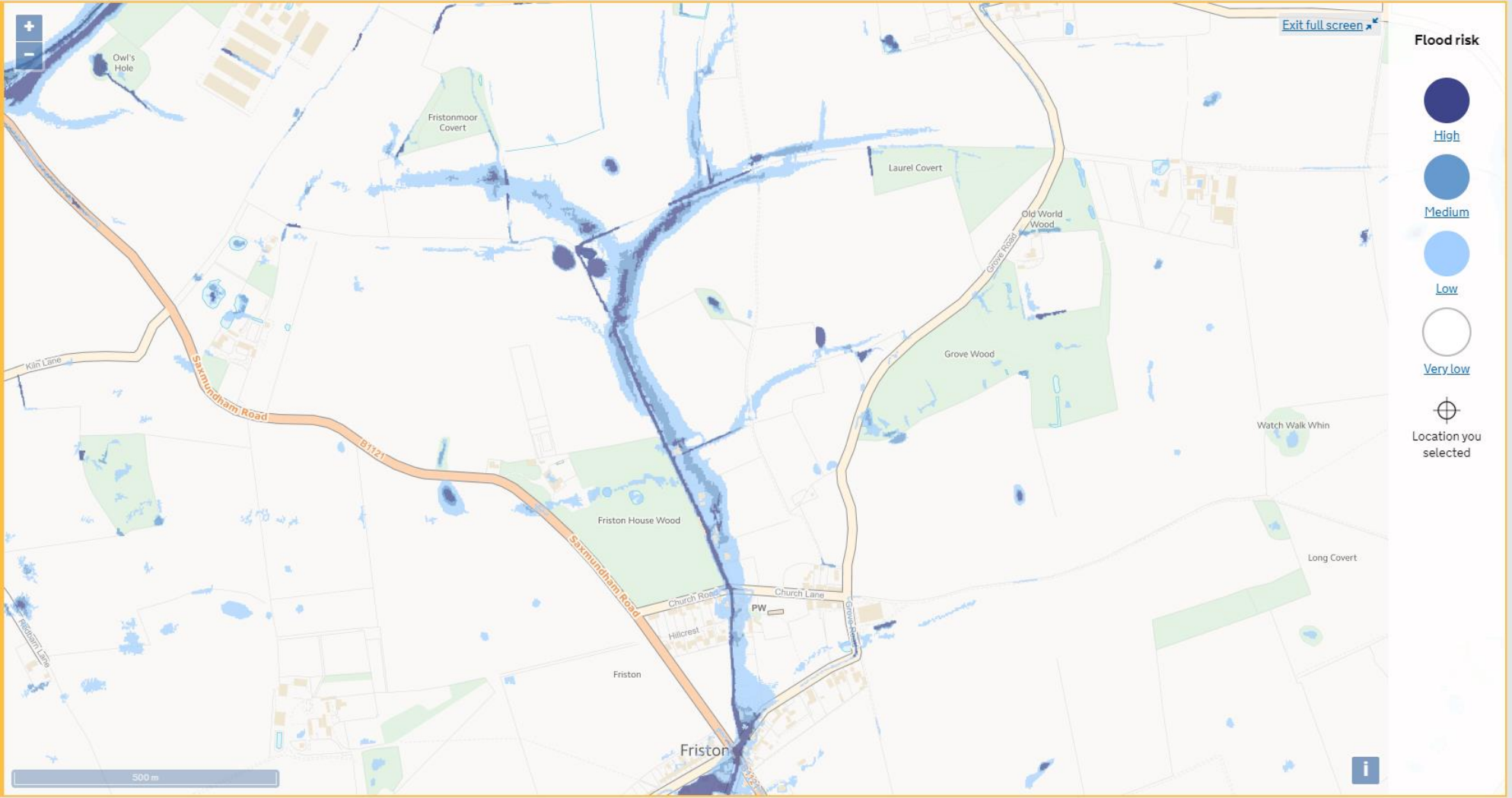


Figure 2 – Environment Agency National Mapping, surface water flood risk, North of Friston

Adequacy of Application/DCO

- 11.18. The draft DCO has no explicit requirements for the submission of a permanent surface water drainage strategy in relation to the onshore substations. Reference is made within the OLEMS which would be split into two documents and secured via Requirements 14 and 21, but this is not very clear.
- 11.19. Requirement 22 ensures a surface water and drainage management plan must be submitted for each stage of construction works prior to commencement. The principles contained within the OCoCP are generally acceptable to manage surface water flood risk during construction, although greater reference could be made to the prioritisation of open SuDS, as per local policy. However, some of the details contained within the OCoCP require further clarification;
1. The document contains some contradictory statements regarding the storage of materials within the vicinity of watercourses (Paras 38 & 102);
 2. OCoCP Paragraph 106 states *“the controlled runoff rate will be at least the equivalent to the greenfield runoff rate”*. This should read “at most”. Runoff rates must not exceed greenfield runoff rates, as per local policy; and
 3. OCoCP Paragraph 108 details how surface water flow paths (identified or otherwise) intercepted by the development would be dealt with. However, there is no demonstration that these volumes could be contained and managed within the red line boundary using open SuDS, as per local policy, without increasing off site flood risk or pollution.
- 11.20. The promotor has, through the production of a Flood Risk Assessment (FRA) for the proposed development (ES Volume 3, Chapter 20, Appendix 20.3), satisfied the policy requirements of the Local Plan. Whilst the FRA satisfies policy requirements, we query the level of confidence that can be assigned to the assessment of surface water flood risk in the Friston Watercourse Catchment.
- 11.21. The application does not consider recent surface water flooding in Friston, contrary to local policy.
- 11.22. The FRA proposes to comply with the surface water disposal hierarchy. However, no infiltration testing has been undertaken within the red line boundary. This is contrary to local policy. A review of publicly available information suggests infiltration may not be feasible. In this instance, a discharge to the Main River in Friston is proposed, however the engineering feasibility of this has not been assessed and is a concern.
- 11.23. The principles of surface water drainage for the cable corridor and substation sites during construction and operation have been outlined in Volume 1, Chapter 20.

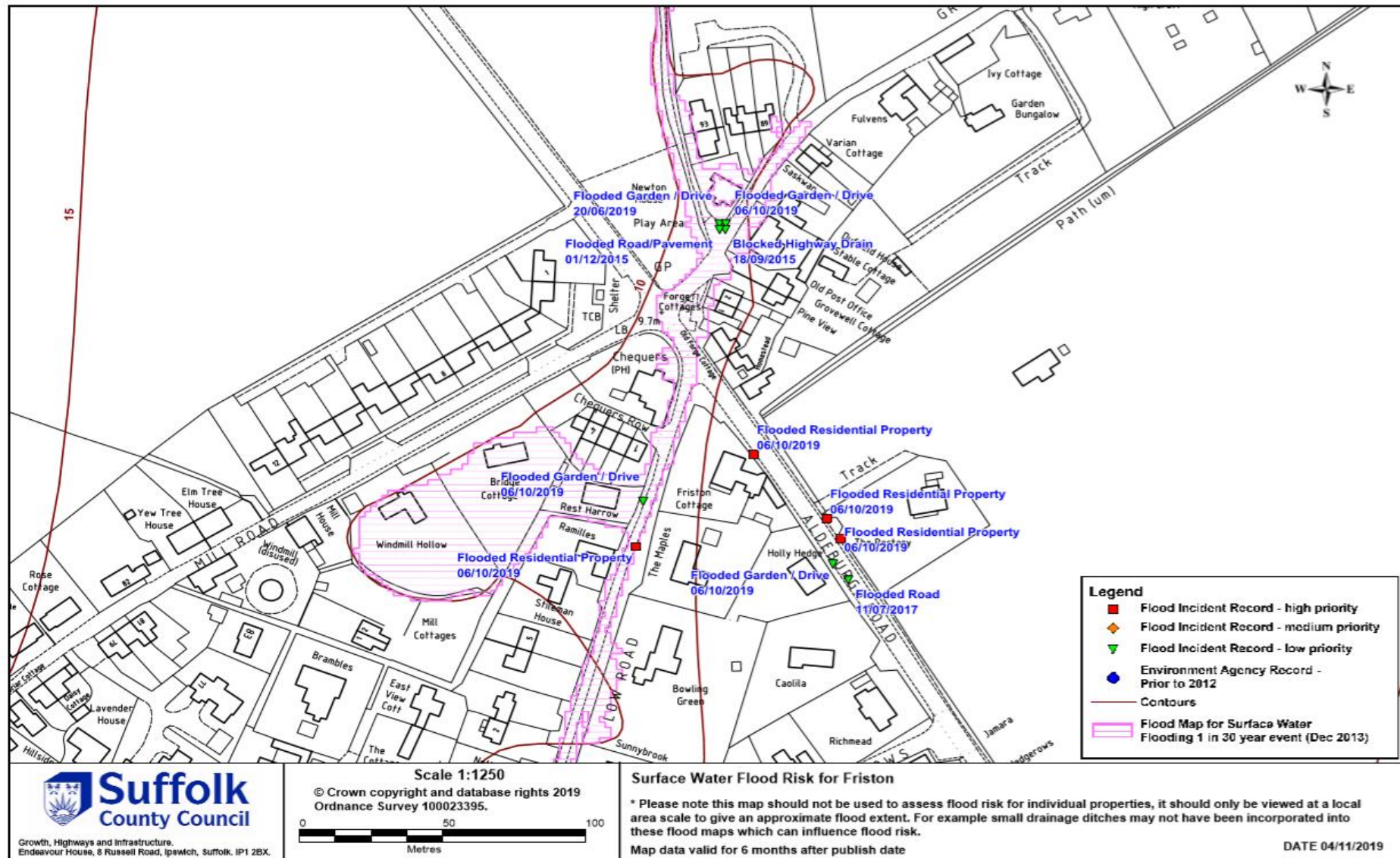
However, it has not been demonstrated this is achievable within the red line boundary, prioritising the use of SuDS. The sizing of the SuDS is assumed to be based on design assumptions that are not stated within the application and have not been agreed with Suffolk County Council as the Lead Local Flood Authority. This is contrary to local policy.

- 11.24. Despite not having a date for decommissioning the proposed development, the application only applies an increase in rainfall intensity due to climate change of 20%. This is appropriate for developments expected to be present until 2069. Given there is no commitment to remove the proposed impermeable areas prior to 2069, a rainfall intensity increase of 40% should be applied, in line with the principles of the Rochdale Envelope.
- 11.25. Volume 1, Chapter 5 states that a confidence value will be assigned to each assessment once undertaken. None of the assessments made under Volume 1, Chapter 20 have been assigned confidence values. Confidence has only been assigned to data sources.
- 11.26. ES Volume 1, Chapter 20 does not consider the Human Environment. Specifically, no consideration is given to the impacts on the residents of Friston as a receptor to an increase in surface water flood risk or the inter-relationship between an increase in sediment supply and an increase in surface water flood risk.
- 11.27. The impact of an increase in sediment supply does not consider the inter-relationship with and subsequent increase in surface water flood risk due to the reduction of channel and culvert capacity due to siltation. The impact of this in the upper reaches of the Friston Watercourse Catchment, particularly in Friston village, could be greater if the residents of Friston were considered as a receptor.

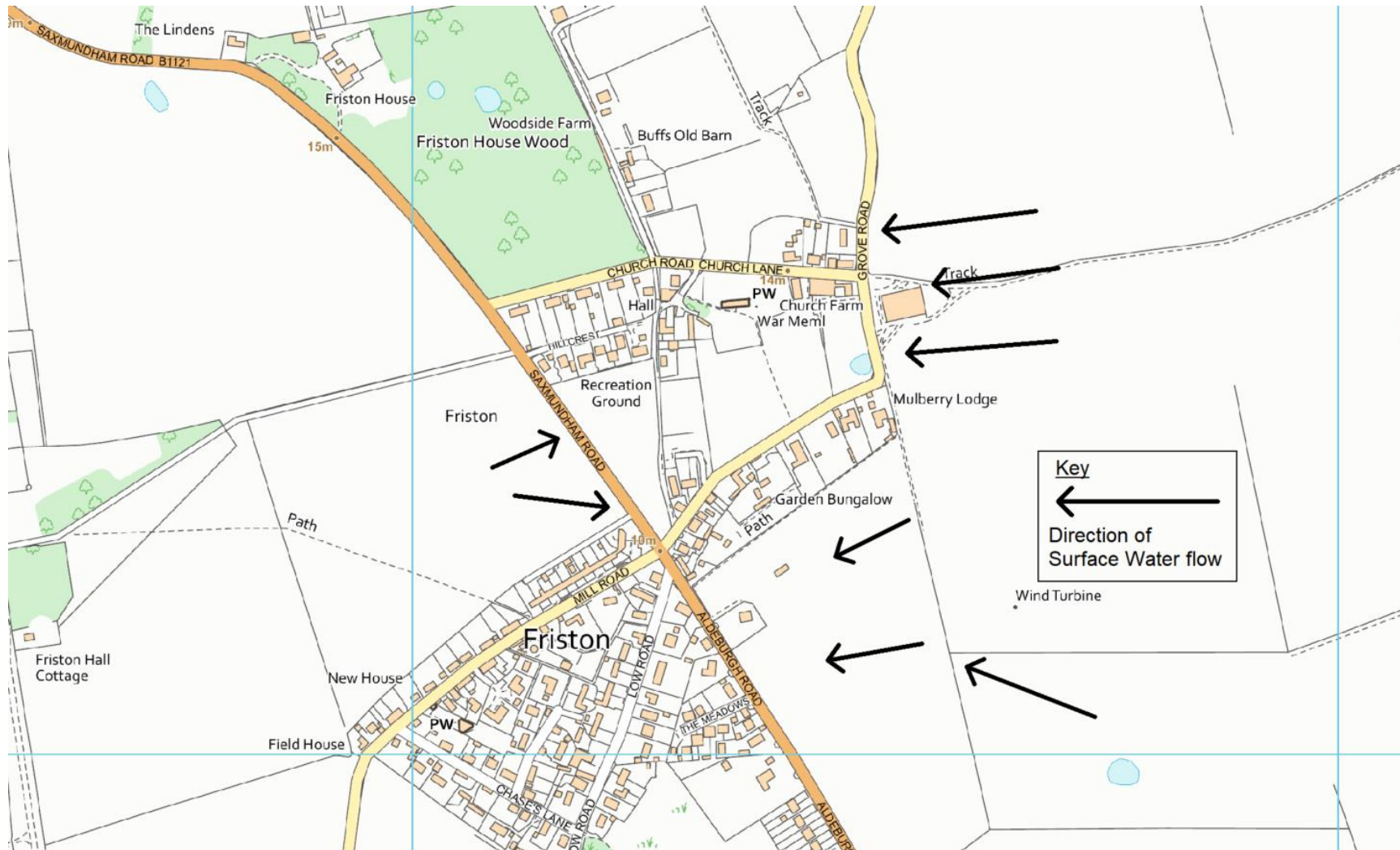
Compliance with Local Policy

- 11.28. The proposal based on the information currently available is not considered compliant with local policy for the reasons set out above.

Plan A – 04/11/2019 Flood Incident Map



Plan B – 06/10/2019 Direction of surface water flows



12. Built Heritage

East Suffolk Council Local Plan Policies

- 12.1. Policy DM21: Design: Aesthetics, requires that the design of any development should have regard to the need to protect existing features that have a heritage value and that where possible such features should be enhanced.
- 12.2. Policy SCLP11.3: Historic Environment, promotes the conservation and enhancement of the historic environment. The policy requires all development which has the potential to impact on historic assets or their settings is supported by a Heritage Impact Assessment and/or an Archaeological Assessment.
- 12.3. Policy SCLP11.4: Listed Buildings, details a clear set of criteria which must be met if development which affects the setting of listed buildings is to be supported. These include the need to demonstrate a clear understanding of the significance of the building and/or its setting alongside an assessment of the potential impact of the proposal on that significance.
- 12.4. Policy SCLP11.5: Conservation Areas, states that development which has the potential to affect the setting of conservation areas will be assessed against the relevant Conservation Areas Appraisals and Management Plans.
- 12.5. Policy SCLP11.6: Non-Designated Heritage Assets, identifies that new uses which result in harm to a Non-Designated Heritage Asset or its setting will be considered based on the wider balance of the scale of any harm or loss.

Other Relevant Policies

- 12.6. The Conservation Area Appraisals for Aldeburgh, Thorpeness, Dunwich and South Southwold and Southwold are relevant.

Key Local Issues

Onshore – Built Heritage

- 12.7. The cable route crosses through a protected woodland to the south of Aldringham Court, a Grade II listed building. The building and its grounds were designed by Cecil Lay and the historic and architectural interest that comes from this association with a well-known local architect contributes to the significance of the asset. The development would require the removal of a section of the woodland to

accommodate the development and the Councils are concerned regarding the implications of the works on the setting of Aldringham Court. The grounds are part of Lay's original design and therefore this designed garden setting is important to the understanding of the significance of the building. The loss of part of the original design would therefore alter this setting as part of the original design would be lost. However, it is recognised that there is currently a high degree of visual separation between the building and this piece of land due to the large laurel hedge that forms a boundary to the formal gardens to the front and side of Aldringham Court.

- 12.8. The Councils have significant concerns regarding the harm the development will cause to the significance of a number of listed buildings which surround the substation site due to the impact of the development on their setting. In particular there are three Grade II listed 17th Century farmhouses (Little Moor Farm, High House, Woodside Farm) which are well preserved examples of local vernacular building tradition. These farmhouses have direct and proximate relationship to their agricultural setting and have a special, long established, relationship with the traditional farmed landscape. The continuing productive agricultural use of the surrounding land, its character and openness contribute significantly to the setting of the listed buildings.
- 12.9. The relationship between these buildings and their farmland setting will be fundamentally changed by the introduction of industrial development of the scale proposed. The scale and prominence of the proposed development in that setting is striking; the substation buildings would be within 500m of all of these assets. The existing pylons do not disrupt this setting to anywhere near the same extent as the proposal, the landscape is still fundamentally rural in character and the farmhouses can be appreciated in their rural setting surrounded by open, productive farmland. The development involves a transformation of the landscape character of the site to that of an industrial or other essentially urban, built up use of land. As well as the visual impact of the substation infrastructure, harm will also be caused by virtue of the loss of agricultural use over a wide area within the farmhouses' setting.
- 12.10. The Church of St Mary is Grade II* listed. The Councils are concerned that the substations developments to the north would challenge the dominance of the church as a landmark building in the village and would therefore cause harm to the significance of the asset. Village churches were built as landmark buildings within settlements; the tallest building which would be a prominent feature in views from within and around the village. Due to its height the church also helps to connect the outlying farmhouses and other buildings to the core of the village, the inter-visibility between the church and other buildings surrounding the village centre is an important part of the church's significance. The proposed development lies to the

north of the church and would block views of the church from the farmhouses that lie to the north of the settlement core on the edge of the historic common land.

- 12.11. The historic parish boundary between Friston and Knodishall runs directly through the middle of the proposed substation locations. This is represented on the ground by a trackway that is a PRoW. This route connects the historic common land to the north to the village core surrounding the church. There are clear views of the church when approaching the village from the north following the PRoW. Further research has been completed to ascertain the age and significance of this feature. The PRoW is proposed to be re-routed. The Councils are concerned about the destruction of this historic route and loss of an important view of the Grade II* listed church.
- 12.12. The Councils are concerned about the impact of the proposed Outline Landscape Mitigation Plan on the setting of High House Farm, Little Moor Farm, Woodside Farm and the Church of St Mary. While the estimated growth rates are contested by the Councils this does not change the fundamental issue when it comes to the impact on heritage assets. The landscape mitigation plan shows significant areas of new woodland in close proximity to these historic farmhouses and the church. Rather than mitigating the impact on these assets the mitigation may have a further negative impact. While some historic field boundaries are proposed to be reinstated to the south of the site these large areas of woodland have no historic precedent and merely have the effect of further severing the relationship between these historic assets and their open agricultural setting.

Offshore – Impact on Onshore Built Heritage

- 12.13. In relation to offshore the main issue relates to the impact of the presence of the turbines on the uncluttered seascape and the importance/contribution this uncluttered seascape has on the onshore heritage assets. The Councils are particularly concerned about listed buildings and parts of conservation areas that were specifically designed as seaside holiday resorts to take in the open vistas and natural beauty of the Suffolk coast. Qualitative change in the nature of the sea view diminishes the contribution that this setting makes to a historic seaside resort. The introduction of turbines into this setting will introduce a man made, almost industrial, addition to the seascape. The seascape, especially at the horizon, is an unchanged part of the historic setting of the assets. The introduction of a large number of fixed structures that stretch right across the horizon with no respite would therefore be a drastic change to the historic setting of these assets. The harm could be mitigated if the turbines did not stretch right across the horizon, as with previous turbine arrays which have been more tightly grouped, which would allow at least some views of the unchanged seascape.

Adequacy of Application/DCO

Onshore – Built Heritage

- 12.14. Appendix 24.7 Assessment of the Impact of Onshore Infrastructure in the Setting of Heritage Assets. A number of times within this document the author(s) make an attempt to define the setting of the heritage assets in spatial terms (e.g. paragraph 45 *‘the positive contribution that setting makes to the significance of Little Moor Farm is therefore largely limited to the area within 200m-300m of the farmhouse’*). This is not considered to be useful and may also be considered misleading as the NPPF definition of setting states, setting is: *‘the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve.’*
- 12.15. The assessment of the impact on High House Farm states that the *‘lack of close public access following the diversion of the Public Right of Way (PRoW) means that there are no informative close-range views of the farmhouse from where its architectural interest can be appreciated’* (paragraph 60). This statement is inaccurate as the significance of a listed building does not depend on views from the public realm and therefore there are informative close-range views of the farmhouse; from within its own curtilage. The assessment of this asset is further flawed by the statement *‘Screening by vegetation and surrounding buildings and the absence of close-range views means that the historic character of the Listed Building cannot be readily appreciated from its setting, diminishing the value of the views affected by the proposed East Anglia TWO and East Anglia ONE North projects.’* (paragraph 69). By definition the setting of a heritage asset is the surroundings in which it is experienced so it is not clear what point this statement is trying to make. Given that paragraph 67 states that *‘The presence of the onshore substations and National Grid substation, only 450m to the south-east, would represent a significant change in the character of the landscape in views looking south-east in the setting of High House Farm’* the Councils consider that the proposal would result in adverse impact of medium magnitude so the effect would be of moderate significance in Environmental Impact Assessment (EIA) terms.
- 12.16. Cultural Heritage Viewpoint 5 is supposed to show the predicted visual impact on the setting of Woodside Farm. However, the angle of the viewpoint selected means that the building itself blocks any views of the proposed location of the eastern substation. There is therefore no baseline or indicative views from which an informed opinion can be formed. The eastern substation location is still within 450m of the farmhouse cutting off what are currently extensive views of the agricultural landscape and inserting large scale industrial structures.

- 12.17. The Councils consider that there would still be an adverse impact of medium magnitude on Woodside Farmhouse if just the eastern substation was constructed. The Councils also disagree that the proposed mitigation planting would reduce the impact of the proposals. The new woodland planting to the north is not a historic feature of the landscape and would create further separation of the farmhouse from the agricultural landscape setting. The land only rises very slightly and there are currently long-range views all the way across to Laurel Covert. The statement that the *'farm would be retained in an area of fields sufficient to provide an appropriate setting' (161)* is meaningless. How has it been decided that this is an 'appropriate setting' and based on what evidence? The setting of the farm will be changed from an expansive agricultural landscape broken up with hedgerows and hedgerow trees to a few small fields between the farmhouse and large-scale industrial structures partially screened by a large new section of woodland. The Councils therefore do not consider that the proposed landscape mitigation would mitigate the harm to the heritage asset and the impact should be considered to be moderate in EIA terms even after mitigation.
- 12.18. Given that it is stated in assessment that the substations *'would entirely obstruct the sequential longer range views of the church tower from the north when approaching Friston on the public footpath from Little Moor Farm' (paragraph 108)* the Councils consider that the adverse impact on the Church of St Mary should be of medium magnitude. This is a key view of the church from a PRoW that is thought to have been in existence in some form since the 10th century, before the church was even built. The view from the historic common land at Friston Moor back towards the village core is a vital one in being able to understand how the settlement developed. The church tower is an important landmark and is key to connecting the dispersed parts of the village back to the core. Blocking this PRoW and associated views of the church from the various farmhouses that were built on the edge of the common land substantially diminishes the ability to understand this historic relationship.

Offshore – Built Heritage

- 12.19. The assessment of the impact of the offshore infrastructure on coastal assets is sound (Appendix 24.8). However, the Councils do want to highlight the number of listed buildings that will be impacted by the proposals. Harm has been identified to buildings and conservation areas designed as seaside holiday resorts, the assessment of the impact on Lowestoft describes the proposals as impacting 10 listed buildings. A number of the listings are group listings of large terraces; 1-24(cons) Wellington Esplanade, 16-28(cons) Victoria Terrace, 3-19(cons) Kirkley Terrace. This means that in fact over 50 listed buildings in Lowestoft will be impacted.

Summary

12.20. The Councils have identified harm in relation to the setting of the heritage assets which should be considered against paragraph 196 of the National Planning Policy Framework. Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposes a duty to have special regard to the desirability of preserving listed buildings and their settings and case law (*East Northamptonshire DC v Secretary of State 'Barnwell Manor'*) has established that a finding of harm to a listed building or its setting gives rise to a “strong presumption” against granting permission. The Councils consider that the promoter’s assessment of harm is flawed by their assessment of the extent of the setting of the designated heritage assets which is contrary to the definition in the NPPF. This has resulted in their assessment minimising the level of harm the project would cause to the significance of a number of designated heritage assets.

Compliance with Local Policy

12.21. For the reasons set out in the summary the proposal is not considered compliant with emerging local policy specifically Policy SCLP11.3.

13. Archaeology

East Suffolk Council Local Plan Policies

- 13.1. Policy DM21: Design: Aesthetics, requires that the design of any development should have regard to the need to protect existing features that have a heritage value and that where possible such features should be enhanced.
- 13.2. Policy SCLP11.3: Historic Environment, promotes the conservation and enhancement of the historic environment. The policy requires all development which has the potential to impact on historic assets or their settings is supported by a Heritage Impact Assessment and/or an Archaeological Assessment.
- 13.3. Policy SCLP11.7: Archaeology, requires a full archaeological assessment to be provided where a development is affecting areas of known or suspected archaeological importance to ensure provision is made for the preservation of important archaeological remains. The policy makes it clear preference will be given to preservation in situ unless it can be shown that recording of remains, assessment, analysis report and/or deposition of archive is more appropriate.

Other Relevant Policy

- 13.4. In addition, sector-specific advice and guidance should be used to frame the decision-making processes – see Historic England Good Practice Advice, and Historic England Advice Notes (<https://historicengland.org.uk/advice/planning/planning-system/>).

Key Local Issues

Landfall

- 13.5. The Landfall is interpreted predominantly as geophysical anomalies relict of a post medieval landscape. However, there appear to be tracks and boundaries which sit on a different alignment to more recent field systems, and the Historic Environment Record (HER) data includes a record for a possible late prehistoric double ditched enclosure. It is probable that there are multiperiod remains relating to landscape use evident in the geophysical survey data.
- 13.6. Generally, at landfall and across the application area, World War 2 features have been assigned 'low' (local) importance, although this assessment needs testing against the wider context of the Suffolk coast in WW2. The Earthwork Survey

commissioned by the promotor adds detail to the knowledge base of these, within the limits of what was accessible at this stage.

Cable Route - Hundred River Area

- 13.7. There is a complex site on the valley slopes overlooking the Hundred River, to the east of School Plantation opposite Aldringham Court, with features showing on geophysical survey. The post-medieval plantation may mask the earlier topography, but the site appears as a prominent landscape feature, and the initial trial trenching currently being undertaken in the area indicates 10th-14th century AD activity at the site. The indications are that there are well-preserved remains in land that is pasture, with stratified sequences of archaeological features and deposits. The logistics of archaeological mitigation at this point should be considered, beginning with palaeo-environmental assessment to confirm the depths of deposits of interest. Barrows may have continued along this contour from where they survive just to the north on Aldringham Green, and fragments of a *possible* ring ditch were investigated in one of the trenches excavated Nov/Dec 2019.
- 13.8. There are HER records for military sites in particular, as well as a possible late prehistoric double ditched enclosure. The later activity may have had an impact on archaeological remains but should also be considered of heritage interest on its own merit. There is also a possible Bronze Age mound.
- 13.9. Anomalies showing underlying remains relating to past settlement and landscape, including trackways, field boundaries, ladder-like small enclosures (which could be Medieval or Roman) and smaller enclosures suggesting settlement or industrial activity. There are possible ring ditches, one of which was close to a trench from which Early Saxon pottery was recovered from an archaeological feature. This may indicate Early-Saxon activity in the vicinity of an earlier monument.

Cable Route – Friston Area

- 13.10. A large area of activity, including a cluster of enclosures south west of and apparently pre-dating Grove Wood and possible medieval roadside settlement. Within this area also are the possible sites of Buxlow church/chapel. Inconclusive geophysical survey for both areas showed magnetic disturbance which may have natural origins or represent spread material. If there is a church site with a cemetery, there would be high potential for evidence relating to questions of Anglo-Saxon to Post-medieval land use, settlement and religious and funerary practice - whether this is regional or higher importance cannot be understood without trenching. Excavation of a church and burial ground would require potentially extensive, time-consuming and delicate

archaeological excavation. It is suggested that there will be scope for avoidance should sites prove to be chapel site with associated human remains. However, there is another potential pinch-point in the cable route, to the north of Friston Church and the key location has not been subject to archaeological evaluation or metal detecting.

- 13.11. There is also an area of curvilinear ditches southwest of Friston Moor Covert which Suffolk County Council Archaeological Service suggest may represent a Roman site with subsidiary enclosures.

Substations

- 13.12. An apparently discrete site was identified through geophysical survey North of Manor Farm. This is within the area of temporary land uptake, and measures may need to be put in place to avoid it as appropriate.
- 13.13. Possibly reflecting its topographic location, the geophysical survey did indicate a generally lower density of extensive sub-surface remains across the substation site, in contrast with elsewhere on the screen, which has been also suggested by a c2% trenched evaluation at this stage. It will require further ground-truthing but for a large part (but not all) of the substation area there would be no objection to further work being undertaken post-consent. Additionally, the former parish boundary runs through the site in the form of a track and is also identified as the Anglo Saxon Hundred Boundary. Boundaries, particularly meeting points between parishes, are often the location for archaeological remains relating to liminal activities, such as execution sites and deviant burial grounds.
- 13.14. To the west of the main substation site, includes two foci with evidence for enclosures and discrete features, although masked by the electronic interference from pylons. Remains here are within the hypothesised extent of Friston Hall and gardens, which has medieval origins as a manor owned by Snape Priory before it passed into the hands of Cardinal Wolsey.

Offsite Highway Works

- 13.15. There is a pill box of a Suffolk-square type in the area of improvement works to the A1094 which should be preserved in situ. It is not flagged in the ES.

Adequacy of Application/DCO

Assessment of Importance and Heritage Significance

- 13.16. The sound basis of non-intrusive archaeological investigation work presented in the submission should be acknowledged. However, the ES notes that ‘heritage importance (and associated heritage significance) is based on professional judgement and experience rather than any fully substantiated and established levels of heritage significance, as part of intrusive ground-truthing therefore cannot fully support the conclusions in the Environmental and Planning Statements that Chapter 24 of the ES gives a full, robust and comprehensive assessment, and advise that there are risks in the resulting heavy reliance on the data and on currently known assets to inform assessment of impact, design and mitigation.

The Extent of Ground Truthing using Trial Trenching

- 13.17. Best practice is for geophysical survey to be ground-truthed and used as part of a suite of evaluation techniques. There is still potential for more extensive remains or for remains in apparently blank areas for reasons that include, for example, lower magnetic contrasts. Geophysical survey may have picked up large and significant features – such as ring ditches and complex settlement areas - but is less likely to have defined smaller features, burials, unenclosed settlements (e.g. from perhaps the Anglo-Saxon and prehistoric periods). As has been raised at an early stage and throughout Expert Topic Group discussion, in order to accurately assess impacts of the proposal and fully inform planning decisions, trial trenched evaluation is required to ground-truth the survey data. The ES refers to an additional suite of pre-consent field surveys commissioned by SPR, including targeted trial trenching, metal detecting and earthwork survey, but of these the metal detecting survey and full implementation of the intended initial targeted trial trenching have not been undertaken. At present less than 1% of the onshore Order Limits has been investigated through intrusive trenching. A matter of principle is that there is some risk to sites as yet unknown, as preservation would not be fully guaranteed once consent is granted, and the residual impacts of the potential destruction of sites where preservation would be more appropriate than preservation by record cannot be fully judged at this stage.
- 13.18. Deferring evaluation to post-consent also means that the scope of excavations is unknown, which could affect other elements of project planning. The Outline Pre-Commencement Archaeology Execution Plan is intended to establish the logistical considerations in delivering archaeological work with other constraints (for example, sections 3 and 4 cover links with ecology, spills, drainage, dust, waste, hazards,

contamination, flooding, traffic, welfare, transport, health and safety etc). At this stage, however, the required timetables and issues such as required excavation depths and scale and spoil volumes, for example, which may affect construction approaches, dust management, water and sediment management and spoil management are unknown. Archaeology is not clearly set out in the initial high-level project timescales as presented in the EIA.

Public outreach

- 13.19. Finally, the ES makes little reference to outreach/public benefit as part of mitigation beyond appropriate publication of the results and archiving. The DCO and WSI should demonstrate a commitment to delivering enhanced public understanding. This may stretch to long term management of assets, provision of outreach opportunities such as blog, site visits, community involvement, and strategic linking of archaeology with any other landscape/tourism initiatives and public space works.

Compliance with Local Policy

- 13.20. The submitted archaeological information falls short of the level of detail required and contrary to the advice provided to the promotor by the County Archaeology Service and therefore is contrary to local policy.

14.Design and Masterplan

East Suffolk Council Local Plan Policies

- 14.1. Policies DM21 and DM22 set out the criteria for considering the layout and design of development within the District. It is expected that development should relate to the scale and character of their surroundings.
- 14.2. Policy SCLP11.1: Design Quality, seeks to encourage high quality design that responds to the local character, setting out criteria proposals should meet. The policy seeks to ensure development is designed appropriately responding to local context in terms of factors including the overall scale and character, layout and making use of high-quality materials.

Key Local Issues

- 14.3. One of the main concerns of the local community and the Councils is the design of the substations and whether adherence to the Design Principles Statement for which an outline document has been provided would deliver a development of acceptable standards. The Councils want to ensure that all reasonable endeavours have been made to minimise the scale of the substations, through the parameters of the buildings themselves and through its siting, specifically whether it could be lowered into the ground.

Adequacy of application/DCO

- 14.4. The Outline Onshore Substation Design Principles Statement (document 8.8) sets out the design principles which will underpin the design of the operational substation. Requirement 12(2) ensures that the details provided by the promotor under this requirement accord with the Outline Design Principles Statement. It is understood that this document should also be read in association with the provided principles for the overall substation site design.
- 14.5. Requirement 12 however does not include the same constraint in relation to the National Grid substation which would by virtue of the current wording of the DCO not be required to accord with the Outline Design Principles Statement. The Councils consider that the design principles should relate to all the substations on site and therefore the wording of the DCO should be amended accordingly.
- 14.6. Insufficient detail has however been provided by the promotor for the Councils to be able to adequately assess the design of the development. The submission material

does not include details of the existing and proposed site levels, finished floor levels of the substations or any cross section through the substation site. Two finished floor level figures 19.8m and 21.4 AOD have been provided within the Outline Onshore Substation Design Principles Statement (Document 8.8, paragraph 11) but it is not clear which point on the platforms these figures relate to and whether the platforms are one uniform level. This matter is further confused as different finished floor level figures are provided in the OLEMS (Document 8.7, paragraph 104) where the levels are stated to be 18.2m and 20.7m AOD. It is also understood that some cut and fill will be required on the site but details of this are not clear.

- 14.7. The outline design principles as set out do not include a clear commitment to reducing the overall size of the substation and height of the buildings and equipment during the design refinement process post consent. This is of vital importance given the significant effects identified within the ES and the significant concerns expressed within Section 15 on Landscape and Visual.
- 14.8. The outline design principles also do not include a commitment in relation to noise mitigation. Within Section 19 on Noise and Vibration, the Councils have expressed significant concerns regarding the predicted noise rating at the substations site and would wish to see a principle which would require the substation to be designed to mitigate noise pollution. This could include the location of the largest noise sources away from noise receptors and require the installation of noise mitigation/suppression.
- 14.9. The Outline Design Principles Statement as drafted does not provide the Councils with sufficient confidence that the promotor will seek to secure a substation design where every effort has been made to reduce the overall size of the structure and its noise impact. The fact that the principles would not relate to the National Grid substation is also considered unsatisfactory.
- 14.10. Without appropriate changes to the Outline Design Principles Statement the Councils consider that there is insufficient control in relation to the design of the promotor's and National Grid's onshore substations to ensure that the development would comply with local policy.
- 14.11. In addition to the outline design principles providing insufficient control for the proposed development, neither the design principles nor the illustrative masterplan adequately considers the potential of future development. As highlighted in Section 26, National Grid has clearly shown through their connection offers for Nautilus and Eurolink interconnectors and preliminary connection offers for the Galloper and Greater Gabbard wind farm extensions, that the substation proposed under this

application will provide a strategic connection offer for future projects. The masterplan should therefore address the potential future expansion needs of the National Grid substation at the very least. The status and treatment of the National Grid substation needs further consideration taking into consideration the principles of good design.

Compliance with Local Policy

- 14.12. The Councils do not consider that the application as submitted complies with local policy which emphasises the need for development to relate well to the scale and character of its surroundings. There is insufficient commitment to minimise the scale of the substations, adequately mitigate the noise emitted or address the known future intentions of the site.

15.Landscape and Visual Impacts

East Suffolk Council Local Plan Policies

- 15.1. Policy SP1 seeks to achieve sustainable development by conserving and enhancing the natural and built environment in the district and maintaining and enhancing a sense of place.
- 15.2. Policy SP15: Landscape and Townscape, contains a commitment to protect and enhance the various landscape character areas within the District. These include not only the statutory designations such as the AONB but also refer to the Special Landscape Areas covered by Policy AP13 of the saved policies from the earlier Local Plan relating to a number of river valleys and tributaries including the Hundred River valley which is affected by the cable route.
- 15.3. Policy SCLP10.4: Landscape Character, requires development to be informed by, and sympathetic to, the special qualities and features described in the Suffolk Coastal Landscape Character Assessment (2018) and Settlement Sensitivity Assessment (2018). The policy sets out an expectation that proposals demonstrate how they will protect and enhance a number of factors including the special qualities and features of an areas, the visual relationship and environment around settlements and their landscape setting, distinctive landscape elements, seascapes, river valleys and significant views. Development will not be permitted where it will have a significant adverse impact on sensitive landscapes. Conserving and enhancing the landscape and scenic beauty of the AONB is identified as being of particular importance.

Other Relevant Local Policy

- 15.4. The Suffolk Coast and Heaths AONB Management Plan draws attention to the special landscape characteristics of the AONB and that they should be protected and enhanced. These are set out in detail in the Character and Special Qualities document.
- 15.5. The Developers' Guide identifies that contributions might be required for hard or soft landscaping including for maintenance.

Key Local Issues

15.6. The principal issues of concern are twofold:

1. The landscape and visual impacts of the onshore elements of the project, including the cumulative impacts between EA1N and EA2.
2. The visual, landscape and seascape impacts of the offshore turbines on the Suffolk coast generally, as well as the AONB and its setting, including the cumulative impacts between the projects.

15.7. In addition, the secondary concerns are:

1. Cumulative effects with other projects - the in-combination effects between the construction and operation of the proposed projects and the construction and operation of Sizewell C Nuclear Power Station is also a highly relevant consideration.
2. Construction effects - The Councils have also identified landscape and visual impacts associated with temporary development, particularly cable corridor works at Sizewell Gap and Aldringham which are a significant concern.
3. Loss of hedgerow and woodland trees - The residual impacts associated with the loss of hedgerows and woodland in the cable corridor and the associated constraints on replanting (and consequential impacts for landscape character and visual amenity). We do expect residual impacts on the character of the landscape in the cable corridor because of the loss of woodland at Aldringham, specifically on the east side of the B1122 adjacent to Gypsy Lane, as well as on the west side of the B1122 south of Aldringham Court (Aldringham Nursing Home, formerly Ralsend). Woodland will also be lost at Laurel Covert in association with the sub-station development.

Adequacy of Application/DCO

Design Assessment and Mitigation of the Substations at Friston

15.8. At the substation site north of Friston, it will be important in particular to understand whether all reasonable endeavours have been made to minimise the scale, both through the parameters of the buildings themselves and through its siting, specifically whether it could be lowered into the ground. This matter has been further discussed in Section 14 of this report.

- 15.9. Furthermore, it will be further important to understand whether the proposed mitigation planting and suggested growth rates are capable of being delivered and that management of the site and associated planting is adequately secured for the long term, given the significant visual envelope of the development. In addition to the visual impacts there will be significant and permanent change to the character of the landscape at the substation site including the surroundings and amenity of the village of Friston.
- 15.10. These matters have been a key concern of Friston Parish Council (in East Suffolk District) and residents in this area.

The Character of the Landscape at the Substation Site

- 15.11. The promotor has not fully understood the character and significance of some of the features and landscape elements of the site, especially regarding the historic landscape character. Therefore, it has not been possible for the ES to fully recognise the degree of harm caused by the development. An additional study of the site and its historic landscape features has been prepared by Suffolk County Council Archaeological Service. In summary the findings are as follows:

Extant historic landscape features, of local and regional importance, will be permanently destroyed as a result of the substation development. This will include the permanent destruction of part of the track as part of the historic Hundred and parish boundary, as well as of historic field boundaries. As such the landscape context of the regionally and potentially nationally significant moated site and associated land will be affected.

Proposed Mitigation Planting and Visual Impacts

- 15.12. The submitted application did not adequately justify the effectiveness of the onsite planting at the substation site. The proposed growth rates are not reasonably likely to be achievable in the local conditions which include relatively light, free draining soils, and prolonged dry spells with little or no effective rainfall through the critical spring and summer periods. The repeated claim in the ES that new planting will be approaching maturity after 15 years is not accepted by the Councils, and therefore neither are the claims of effective mitigation after 15 years accepted. As a result, the findings of the Landscape and Visual Impact Assessment (LVIA) regarding the visual impacts of the substation site are not sound. Furthermore, the species set out in the OLEMS (document ref 8.7 p25-26) are not agreed. We are seeking to engage with the promotor to resolve this issue and for them to update the LVIA, including the

visualisations, based on agreed, realistic growth rates and agreed species. The Councils had previously provided their views on these matters, prior to submission of the DCO, to a timetable agreed with the promotor.

The Substation Visualisations

- 15.13. The reliability of the submitted visualisations is compromised by the inclusion of areas of advanced planting which suggest the possibility of four years growth by the first year of operation, but with the risk of this advanced planting not actually being guaranteed deliverable.
- 15.14. Generally, the representation of planting particularly that said to illustrate 15 years of growth is not accurate or reliable. Much of the illustrative material in the LVIA appears to show trees and vegetation of significantly greater maturity, including features present which are indicative of vegetation around 50-60 years of age or older.
- 15.15. The findings of the LVIA in the application have led the promotor to conclude that no additional offsite planting is required to mitigate the visual impacts of the substation site. Therefore, no s106 agreement has been proposed in order to mitigate residual impacts. However, a scheme of offsite planting has been proposed under s111 of the Local Government Act 1972, which we recognise is therefore not a material planning consideration.

Assessment of Impacts and Mitigation in the Cable Corridor

- 15.16. The Councils accept that the undergrounding of the cabling in its entirety provides significant mitigation against visual and landscape impacts.
- 15.17. The issue of hedgerow loss from an ecological perspective is discussed in Section 5.3 of the OLEMS. The ES (Chapter 22, Summary Table 22.26 and Annex 1) concluded that there would initially be Major Adverse Effects resulting from hedgerow crossings in several locations although these can be mitigated through replacement planting with residual effects reducing to Minor Adverse. However, it is the view of the Councils that because these hedgerows were characterised by substantial trees within them that would be removed and not replaced, significant adverse effects on landscape character will persist.
- 15.18. From a landscape perspective, the OLEMS notes that there are 65 hedgerows within the onshore development area that fulfil qualifying criteria (including ecological) for classification as 'Important' under the 1997 Hedgerow Regulations. Whilst the

Councils note the intention to reduce working width to 16.1m. wherever possible, this still represents a notable impact on the existing historic hedgerow pattern which is a key characteristic of the prevailing landscape character types. The proposal to carry out a detailed pre-construction hedgerow survey in order to have a detailed inventory of hedgerow characteristics to aid reinstatement is welcomed, as is the intention to install root protection areas for retained hedgerows during construction. The appointment of a suitably qualified arboricultural clerk of works by the developer will be sought by the Councils. The outline replanting proposals are acknowledged and at this stage are accepted as a positive move towards restoration of key landscape features.

- 15.19. Deer fencing is essential for effective establishment and protection of new woodland planting, it is at present not clear under which requirement of the DCO is secured.

Compliance with Local Policy

- 15.20. The project by virtue of its identified significant landscape and visual effects and for is not considered compliant with local policy.

16.Seascape and Visual Effects

East Suffolk Council Local Plan Policies

- 16.1. Policy SP15: Landscape and Townscape, seeks to protect and enhance the various landscape character areas within the district in addition to the AONB. The character of the seascape contributes to the coastal landscape character areas and sections of the AONB.
- 16.2. Policy SCLP10.4: Landscape Character, as set out in paragraph 13.2, the policy sets out the importance of protecting and enhancing the special qualities and features of areas including the contribution made by the seascape.

Other Relevant Local Policy

- 16.3. The AONB Management Plan draws attention to the special landscape characteristics of the AONB and that they should be protected and enhanced. These are set out in detail in the Character and Special Qualities document.

Key Local Issues

EA1N Project

- 16.4. The offshore wind turbines of the EA1N project will have significant adverse effects only in-combination with those of EA2. Overall there will be significant adverse landscape and visual effects on the coast of Suffolk from these projects cumulatively, including on the character and special qualities of the AONB. These impacts have been identified by the promotor in the Seascape Landscape and Visual Impact Assessment (SLVIA). The Councils consider that the proposals in combination for the offshore turbines will have a direct and long-term negative impact on the nationally designated landscape and, given the design of the submitted scheme, that this cannot be fully mitigated.
- 16.5. The Councils are not satisfied, given the sensitivity and designation of the receiving landscape and seascape in general, that the promotor has demonstrably exhausted all reasonable mitigation measures to limit the cumulative impacts of this project with EA2 in terms of design of the EA2 scheme, including the height of the turbines.

EA2 Project

- 16.6. The offshore wind turbines of the EA2 project will have significant adverse impacts on the coastline between Covehithe and Orford. In addition, they will have significant in-combination effects with EA1N. Overall there will be significant adverse landscape and visual effects on the coast of Suffolk from these projects, including on the character and special qualities of the Suffolk Coast and Heaths AONB. These impacts have been identified by the promotor in the SLVIA. The Councils consider that the proposals for the offshore turbines will have a direct and long-term negative impact on the nationally designated landscape and, given the design of the submitted scheme, that this cannot be fully mitigated.
- 16.7. The Local Authorities are not satisfied, given the sensitivity and designation of the receiving landscape and seascape in general, that the promotor has demonstrably exhausted all reasonable mitigation measures in terms of design of the scheme, including the height of the turbines.

EA1N and EA2 Projects

- 16.8. The horizon and sea views along this coastline are largely uncluttered and as such make a significant contribution to the character of place and the setting of the AONB and Heritage Coast. The nationally designated landscape of the AONB including its character and condition is much valued by visitors and residents alike and makes a key contribution in the local economy (see Section 20).
- 16.9. The Councils recognise that the principal consultee in respect of the impacts of the development on the AONB and their significance is Natural England. However, the Councils are seeking to meet their duties under section 85 of the Countryside and Rights of Way Act 2000 and to reflect the concerns of local communities.

Adequacy of Application/DCO

EA1N - Design, assessment and mitigation of the offshore turbines

- 16.10. The promotor has identified significant cumulative effects between the two projects and that there will be significant adverse impacts on the coastline and coastal waters including on the character and Special Qualities of the AONB. Despite this finding they have concluded that it is not possible for these impacts to be mitigated. Therefore, no s106 has been proposed. However, works to “offset” the harm caused are proposed to be funded through a s111 agreement, which we recognise is not a material planning consideration.

EA2 - Design, assessment and mitigation of the offshore turbines

- 16.11. The promotor has identified significant effects from the EA2 project, and also in combination with EA1N, and that there will be significant adverse impacts on the coastline and coastal waters including on the character and Special Qualities of the AONB. Despite this finding they have concluded that it is not possible for these impacts to be mitigated. Therefore, no s106 has been proposed. However, works to “offset” the harm caused are proposed to be funded through a s111 agreement, which we recognise is not a material planning consideration.

Compliance with Local Policy

- 16.12. The development by virtue of the significant adverse effects identified in the ES on the AONB is not considered compliant with local policy.

17.Land Use

East Suffolk Council Local Plan Policies

- 17.1. Policy SP29: Countryside recognises that the countryside is an important economic asset supporting uses including agriculture.
- 17.2. Policy SCLP10.3: Environmental Quality, seeks to protect high quality agricultural land where possible and states that proposals will be expected to minimise the loss of agricultural land.

Other Relevant Local Policy

- 17.3. The East Economic Growth Plan 2018-2023 and NALEP Economic Strategy for Norfolk and Suffolk in 2017 identifies agriculture as an important and long-established sector in East Suffolk.

Key Local Issues

- 17.4. The main issue relates to the loss of agricultural land and disruption to agricultural activities. The majority of the land within the onshore Order Limits is arable although there are some non-agricultural areas comprising woodland and waterbodies.
- 17.5. The onshore development area covers Grade 2 (very good), Grade 3 (good to moderate) and Grade 4 (poor) agricultural land. The onshore substation and National Grid infrastructure will result in the permanent loss of agricultural land of Grade 2 and Grade 3 quality. The construction works for at the landfall and along the cable route involve the temporary loss of land out of agricultural production. Agricultural land is vulnerable to structural damage, erosion, compaction and introduction of notifiable weeds. The works may also degrade the soil quality and future agricultural productivity.
- 17.6. The principle of whether the application is an appropriate use of land has been discussed within Section 6 Principle of Development. The impact of the application on the PRoW is discussed within the next section of the report (Section 18).

Adequacy of Application/DCO

- 17.7. The ES identifies that the impact on agricultural land is minor adverse during both construction and operation phases. Requirement 22 of the draft DCO secures the production of a Soil Management Plan as a sub-document of the CoCP. The OCoCP

states that this Soil Management Plan will describes methods to avoid mixing of subsoil, minimise soil compaction and disturbance to the surrounding areas and reinstatement of soils in general accordance with their original structure and location. The Soil Management Plan will also include Method Statements for soil handling. A pre-construction land survey will be undertaken by a qualified Agricultural Liaison Officer to record details of crop regimes, position and condition of field boundaries, existing drainage and access arrangements and private water supplies.

- 17.8. The promotor has stated in Chapter 21 of the ES that it is not possible at this stage to calculate the area of land which would become isolated or inaccessible, it is however likely that this will be a relatively small area. The Councils urge the promotor to make every effort to keep such areas to an absolute minimum and to fully engage with individual farmers to ensure this is the case. Agricultural land is an important and prevailing characteristic of the landscape.
- 17.9. Although it is acknowledged that the promotor will seek to minimise disruption to farming practices via good management measures secured through the CoCP, the development will still result in the permanent loss of an area of Grade 2 and Grade 3 agricultural land by virtue of the choice of substation site.

Compliance with Local Policy

- 17.10. Although the loss of agricultural land is regrettable, the Councils concern in this regard primarily relate to the impact this will have on the landscape character and setting of heritage assets (see Sections 12 and 15). With the exception of the substation site, to the best of the Councils understanding, the measures outlined in the CoCP and within the submission will help to minimise impacts on agricultural activities.

18.Public Rights of Way

East Suffolk Local Plan Policies

- 18.1. SCLP10.4: Landscape Character recognises the importance of the PRoW network in relation to supporting health, wellbeing and social interaction and seeks to protect and enhance the provision.

Other Relevant Local Policy

- 18.2. Suffolk Green Access Strategy (Rights of Way Improvement Plan - ROWIP) is a statutory Plan produced by Suffolk County Council as required by the Countryside and Rights of Way (CROW) Act 2000 (Section 60 and 61). It provides a clear direction as to how the rights of way and access network is managed, maintained and improved to meet the needs of all users.
- 18.3. Improving the quality of the experience on urban and rural rights of way has become increasingly important politically and strategically and the Green Access Strategy highlights the importance of the rights of way and access network for health and wellbeing, safe and sustainable travel, leisure activity and economic growth. It represents Suffolk County Councils' commitment to making the very most of this asset and to provide our residents, our business community and our visitors with an array of different and innovative opportunities to use, enjoy and benefit from.
- 18.4. Objectives within the Strategy include protecting the network from adverse impacts from new developments and to create a more connected network.

Key Local Issues

- 18.5. The onshore works associated with the cable route will affect 26 PRoWs in the locality during construction, whilst the substation works will require the permanent stopping up of a section of PRoW to the north of the village of Friston. The access network serves both residents, visitors, and tourists.
- 18.6. Around the village of Friston, the access network will be severely compromised by the construction of the substations site and residents, and others, will suffer both temporary disruption and permanent loss of a key public footpath.
- 18.7. The access network including PRoWs, open access and common land are also key features of the visitor experience of Suffolk. The quality of the coastal landscape, its high level of accessibility and its connectivity to coastal towns, villages and

hinterland, are the draw for visitors. A third of Suffolk's residents say the countryside is the best thing about living in Suffolk, making green access a key driver in growing the visitor economy (Destination Research, Economic Impact of Tourism Suffolk 2016).

- 18.8. The Councils therefore want to ensure the disruption to the PRow network is minimised and where impacts cannot be avoided, appropriate and timely mitigation needs to be provided.

Adequacy of Application/DCO

Amenity and Quality of user experience on PRow affected by the development

- 18.9. The impact of the development on the amenity and the quality of the user experience of the PRow network has not been adequately addressed in the application. This aspect should be a separate theme within the ES in order to address the impact on both the tourism industry and local communities.
- 18.10. The promotor has addressed some of the logistical aspects relating to the closure of the physical infrastructure of PRow with the provision of alternatives, temporary and permanent, through the Outline PRow Plan but has not addressed the impact on the amenity value of these PRow.

Cable Corridor and Landfall Site

- 18.11. The fact that many PRow along the cable corridor and substation site will only be closed temporarily does not mean that they are preserved as a local amenity when the ability to derive any enjoyment from them is severely reduced. The application does not recognise or mitigate for this loss of amenity.
- 18.12. In the Tourism, Recreation and Socio-Economics - Chapter 30, the promotor has failed to recognise that the Sandlings Walk is a tourism asset. It is a long-distance route that is promoted nationally (Cicerone publication and shown on OS Explorer Maps) and should according to Table 30.10 have a medium sensitivity. Appropriate mitigation should be applied.
- 18.13. The promotor has failed to identify that the proposed route of the new National Trail, the England Coast Path, will be affected by the landfall site. This will be the first National Trail in Suffolk and is anticipated to bring economic benefits to the region.

Substations Site

- 18.14. The choice of location for the viewpoints with regards to the Landscape & Visual Impact (Chapter 29) at the substation site is not adequate with respect to the impact on walkers. The selection of viewpoints situated 1km apart at the extremities of the public footpath on the western edge of the substation site (Friston FP17) inevitably results in an underestimate of the actual impact of the development on a person walking that footpath.
- 18.15. There are no viewpoints taken from the proposed new public footpath that replaces the permanently stopped up footpath. This new route is wholly exposed to views of the development and thus the impact of the amenity and quality of the walking experience has not been recognised, or mitigated, by the promotor.

Permanent Closure of Public Footpath at the Substations Site

- 18.16. We disagree with the statement in the Onshore Substation Design Principles Statement that the “overall site design will seek to deliver gains for public amenity, including enhanced access through PRow proposals”.
- 18.17. The permanent stopping up proposals will remove a historic, tranquil and attractive walking route in a rural landscape and replace it with a circuitous route that is not wholly screened from the new industrial landscape, running adjacent to the open road in parts and possibly in a ditch. During construction, there will be physical disruption, noise, a loss of tranquillity and a severe visual impact which will continue following construction. This is not a gain to the pleasantness and attractiveness of the walking routes around Friston.
- 18.18. The plan showing the proposed alternative public footpath is not adequate. The locations for the new alternative routes need to be accurately surveyed and mapped, together with a written description, including width, so that a definitive map and statement can be produced post-DCO.

Outline Public Rights of Way Strategy (OPRow)

- 18.19. The principles for management in the OPRoW are broadly acceptable for taking forward to the detailed PRow strategy. However, there is inadequate detail provided as to the phasing and duration of closures, particularly where several PRow are close together and the PRow at the substation site. The Councils are concerned that there could be closures and disruption of a network of PRow all at the same time, leaving local walkers with very limited or no access at all.

Compliance with Local Policy

- 18.20. The importance of the PRoW network is recognised in local policy, the impacts of the development on the network has been set out above. As the proposals currently stand the application is not considered compliant with local policy in respect of protecting and enhancing the PRoW provision. The impacts on the amenity and quality of the user experience has not been fully assessed or mitigated.

19. Noise and Vibration

East Suffolk Council Local Plan Policies

- 19.1. Policy DM23: Residential Amenity, sets out that the Council will have regard to the potential adverse impacts of noise and disturbance on residential amenity.
- 19.2. The supporting text of Policy SP15; Landscape and Townscape, highlights that the AONB and Heritage Coast are protected, not only because of their visual qualities but also for their tranquillity and ambience.
- 19.3. Policy SCLP10.3: Environmental Quality, states that proposals will be expected to protect the quality of the environment and to minimise and, where possible, reduce all forms of pollution and contamination including noise pollution.
- 19.4. Policy SCLP10.4: Landscape Character, identifies that proposals for development should protect and enhance the tranquillity and dark skies across the District.

Other Relevant Policy

- 19.5. AONB Management Plan 2018-2023.

Key Local Issues

- 19.6. The Councils are concerned about the noise and vibration impacts during construction, relating to the works themselves, the operation of the CCSs and associated HGV movements more generally. There are specific locations along the onshore order limits where residential properties sit in close proximity which are of key concern, landfall, area south of Sizewell Gap Road, Aldringham crossing and at the substations site. The Councils have previously raised significant concerns regarding the proposed Saturday working hours.
- 19.7. A key concern of the Councils and the local community relates to the impact of the operational noise from the substations. The background noise levels in this location are typically low, it is considered that the introduction of these new substations in this location will result in elevated noise levels and a potential for significant impact on sensitive residential receptors. It is further considered that as the noise is also uncharacteristic of the area, this will not only have an impact on residential amenity but also on the amenity and character of the area as a whole. In addition to the operational noise level, there is also significant concern regarding the character of

the noise as defined by BS4142 and whether the correct penalties for; intermittent noise, impulsive noise and tonal noise sources have been applied.

- 19.8. The proposals include alterations to the existing National Grid overhead lines which in addition to the realignment works include a new pylon and sealing end compounds. If this work introduces any additional power line tonal noise to nearby receptors this must be fully assessed.

Adequacy of Application/DCO

Construction Noise and Vibrations

- 19.9. Construction noise and vibration is likely to amount to a negative impact on certain receptors at certain times during the construction period. There is an expectation that the principles and requirements of BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise and BS 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration be implemented in full to reduce the impact on sensitive receptors.
- 19.10. BS 5228-1:2009 + A1:2014 utilises an “ABC” methodology, which specifies a construction noise limit based on the existing ambient noise level for different periods of the day and is presented within Table 25.9 of Chapter 25. A SoundPLAN noise model has then been generated utilising; construction noise source data, geographical and topographical data, intervening ground cover and has then been corrected for; the distance between the noise source and receiver, acoustic screening created by barriers, buildings etc. The “on-time” which various plant will operate as a percentage of the assessment period is then calculated to complete the model. The residential receivers have been categorised to have medium sensitivity throughout and the results divided into different phases of the construction programme.
- 19.11. The predictions indicated by this noise model claim there will be no impact on nearby receptors at the landfall location and no daytime impact on nearby receptors at the substation locations or along the onshore cable route. Therefore, the report has concluded that no additional noise mitigation measures will be necessary for these elements.
- 19.12. We note, however, that noise limits for individual receptors have been set on the basis of short-term ambient noise measurements which we consider unlikely to be representative of the typical noise climate at all locations. We also consider that

there is not sufficient information in the report to allow us to determine if the stated noise levels have been modelled correctly. This may have resulted in an underestimation of impact and therefore also in the requirement for mitigation.

- 19.13. It should be further noted that whilst BS 5228-1:2009 + A1:2014 seeks to protect sensitive receptors whilst acknowledging the inherent noise associated with construction activities there are certain points along the cable route that are extremely close to the construction works (principally Sizewell Gap, Aldringham crossing and the sub-station site). Due to proximity of works, duration of works or type of works (which include significant noise sources such as piling operations and may necessitate 24hr operation of plant for dewatering and security lighting) there may need to be an enhanced level of mitigation employed to protect residents adequately and this will need to be addressed in the CoCP along with the “Standard Mitigation” that has been stated in the outline document.
- 19.14. It is likely that in addition to monitoring required to ensure that works are compliant with the relevant standards that extra monitoring will be required in particularly sensitive locations to inform the requirement for localised, site specific mitigation. Plans for monitoring will need to be included in the CoCP and agreed with the local planning authority.
- 19.15. The consultation identified concerns with Saturday Afternoon working for construction activities, this appears to have been addressed in Appendix 25.2 Noise and Vibration Cumulative Impact Assessment:

“As a worst-case scenario, HDD has been assumed to be in operation at the landfall location for 24 hours a day and assessed accordingly; for all other construction activities at the landfall, onshore cable route and onshore substation the assessment is based on construction between the hours of 07:00 to 19:00 Monday to Friday, and 07:00 to 13:00 on Saturday. Piling works may be required to provide a stable platform base for the HDD works at landfall, and for substructure works at the onshore substation and National Grid infrastructure. To present a conservative assessment, piling activity was included in the construction noise modelling and assumed to take place during early mobilisation works in Month 1 to Month 4 at the landfall, and at the onshore substation between Month 7 and Month 10. Piling work in the assessment is based on construction between the hours of 07:00 to 19:00 Monday to Friday, and 07:00 to 13:00 on Saturday.”

- 19.16. Where there is a requirement for night-time or extended working hours, this will need to be agreed in advance with East Suffolk Council through an agreed process to be included in the CoCP.

Operational Noise

- 19.17. Following an initial assessment by the Councils significant concerns were raised in terms of the assessment and likely impact of noise from this project. As a result, the Councils appointed consultants, to review the DCO paying particular attention to operational noise from the projects alone and in-combination with each other and the National Grid infrastructure. A summary of the findings has been set out below.
- 19.18. The report highlights that the background noise levels at night are considered to be considerably lower than the promotor assumed value of 29dB _{LAF90, 5mins}. Based on the consultants own site visit and analysis of the data provided in the submission, it is considered that a noise source generating a rating level of 34 dB LAR at noise sensitive receptors in current setting as proposed, would have a significant adverse impact on the surrounding areas. The report further states that as the noise source is likely to be completely different in character to the prevailing noise climate, it is likely that even noise at a significantly lower rating level would permanently alter the noise environment in the surrounding area. This assessment is specific to this particular location.
- 19.19. The consultant's report raises concerns regarding the calculation methodology, specifically regarding the modelling of noise sources, the lack of information provided regarding the potential noise mitigation and failure to assess noise from any of the proposed National Grid infrastructure. The promotor has received a copy of the report but has yet to respond on any of the points raised.
- 19.20. There are additional concerns regarding the rating level specified, highlighting the incorrect assessment of tonality, the lack of evidence to support the claim that the impulsive and intermittent elements of the noise source will not be distinctly audible at the receptors and that no 'other characteristics' correction should be applied. There are therefore significant concerns that the development proposed would not comply with the noise rating set out in Requirement 26.
- 19.21. The assessment also fails to consider the potential impact of noise on any receptor other than dwellings, so the impact on amenity spaces such as gardens and footpaths which pass close to the site has not been addressed. The assessment has also not addressed the potential impact on non-residential receptors such as wildlife in the surrounding area. Concerns in relation to these matters have also been highlighted in the sections of this report on Ecology and PRow.

- 19.22. The report also raises the question of whether BS 4142 is the appropriate tool to assess the noise impacts in this instance, specifically due to the significant low frequency components of the operational noise and the low background levels of the site. It is suggested that alternative methodologies should have been considered including Defra NNR45 Procedure for assessment of low frequency noise complaints on the basis of absolute noise levels. In the event BS4142 was to be considered as appropriate standard of assessment there are also concerns about the implementation and conclusions of this particular assessment and the underestimation of the noise impact from the substation on sensitive receptors and the amenity of the locality. There are also concerns over the use of BS8233 as an indicator of impact when this standard is out of scope for the situation being assessed.
- 19.23. The Councils are concerned regarding background noise creep. It is noted that the operational noise rating level set by Requirement 26 provides a limit which is applicable for either one project alone or cumulatively for both EA1N and EA2 projects. This limit however represents an increase on the existing background noise level. If the development is consented, the proposal will change the noise climate in the surrounding area. The Councils are aware of existing and potential connection offers being made by National Grid which could result in further development in the locality (see Section 26). Future assessments would then be based on the 'new' noise climate including EA1N and EA2 and result in continued noise creep.

Compliance with Local Policy

- 19.24. The Councils have concerns regarding both the construction and operation noise associated with the project and cumulatively with both projects. It is not considered that the application complies with local policy. The developments alone and in combination would potentially have significant adverse impacts on residential properties, their amenity and the surrounding environment.

20.Socio-Economic Impacts

East Suffolk Council Local Plan Policies

- 20.1. Policy SP1: Sustainable Development, seeks to promote economic activity in the district.
- 20.2. Policy SP8: Tourism, recognises the that tourism is an important element of the district economy. The policy also highlights the East Suffolk *'possesses a high quality built and natural environment rich in history and culture, within easy reach of large numbers of people from within and outside of the area'*.
- 20.3. Policy SCLP6.1: Tourism, recognises that tourism is a substantial and important part of the East Suffolk's overall economy, which brings benefit to quality of life and well-being of communities.
- 20.4. Policy WLP2.2: Power Park, recognises the huge potential for growth in the former Waveney area associated with the development of offshore wind farms.

Other Relevant Local Policy

- 20.5. The importance of clean energy as an economic opportunity for the region is prioritised in the following key economic policy documents:
 - The New Anglia Local Industrial Strategy
 - The Norfolk & Suffolk Economic Strategy
 - The East Suffolk Economic Growth Plan 2018 – 23.
- 20.6. The importance of the tourism sector and the economic benefits that it brings to the local area are also highlighted in the above documents as well as the AONB Management Plan 2018-2023 and the Suffolk Coast Tourism Strategy 2013-2023.
- 20.7. Hardisty Jones Associates Sizewell C Economic Impact Assessment suggest that there could be potential impacts upon tourism and recreation from Sizewell C new nuclear power station during construction and cumulative impacts.
- 20.8. Suffolk County Council Raising the Bar Strategy 2018-2020 aims to promote young people's progression to higher education and to improve youth employment rates.
- 20.9. Inclusive Growth is identified as one of three headline priorities for Suffolk County Council in its Statement of Priorities for 2017 – 2021.

Key Local Issues

- 20.10. The Councils welcome the overall economic opportunity that the construction of EA1N and EA2 will open up for the area and remain committed to working in partnership with SPR to ensure that the potential benefits are fully realised.
- 20.11. The Councils have enjoyed a positive, collaborative relationship with SPR and through the two consented projects of EA1 and EA3, have been able to deliver benefits for the region and SPR through the shared objectives encapsulated in a Memorandum of Understanding.
- 20.12. In our response to the Stage 4 consultation, the Councils highlighted a number of areas in which we hoped to see further action from SPR in order to enhance the local socio-economic benefits achievable.

Tourism

- 20.13. The project alongside other major developments may have the potential to create additional demand for accommodation in the peak tourist season with a potential consequence of either deterring potential tourists due to occupancy rates or driving accommodation prices to a premium.
- 20.14. The Suffolk Coast Destination Management Organisation (DMO) commissioned BVA BDRC in 2019 to evaluate the impact EDF Energy's Sizewell C new nuclear power station and SPR onshore infrastructure associated with EA1N and EA2 wind farms will have on the Suffolk Coast from a tourism perspective. The research involved a visitor survey of both actual and potential regional visitors and a tourism business survey. The survey highlighted that regular tourists who find it difficult to find accommodation will be dissuaded from returning in the future. In the absence of detail regarding where non home-based workers are coming from there is a concern that at certain times of the year this could adversely impact on the availability of tourist accommodation.
- 20.15. The majority of visitors are drawn to the area because of the beauty and tranquillity that it offers with the Heritage Coast and nationally designated landscape of the AONB. With a number of major energy projects being developed along the coast at the same time as EA1N and EA2 (in particular the proposed Sizewell C new nuclear power station), it is likely that this key target market will be significantly impacted. The DMO visitor survey (2019) highlighted that the visitor numbers are likely to drop by 117% - which equates to £20-30 million of lost economic activity in the area.

- 20.16. Emerging evidence from the development of Hinkley Point C highlights the importance of reducing the potential impact of major energy projects on visitor numbers through the proactive agreement of mitigation measures. As such, we are keen for plans to be agreed with SPR in this area as early as possible with an adequate mitigation strategy to offset the anticipated impacts that the projects could have on visitor numbers to the region.

Local Supply Chain

- 20.17. Specifically, opportunities exist for local businesses to become part of the onshore and offshore supply chain as demonstrated through the levels of local contract spend for EA1. The Councils expect to see the same positive commitment to maximise local content for EA1N and EA2 and indeed the EA3 development. Associated with this are the likely employment prospects that would be available through this avenue and through the provision of indirect services.
- 20.18. The potential scale of local economic growth hinges on the choice of both base and marshalling ports, which the promotor has not confirmed. However, it is important that the Councils work with SPR to ensure the £30 million investment from EA1 in port infrastructure at Lowestoft and Great Yarmouth is maximised, specifically EA1's Operations and Maintenance base at Lowestoft.

Skills & Employment

- 20.19. We are concerned that there is the potential for cumulative pressures on the local labour force, leading to significant workforce displacement and a distorted labour market that will adversely impact local businesses. Significant displacement caused by the cumulative pressures of many infrastructure projects, in particular the proposed Sizewell C new nuclear power station, building in the same timeframe will lead to wage inflation and potentially reduce the availability of local workers, necessitating in the need for non-home-based workers traveling into the area.
- 20.20. There is a high-level ambition to develop a sustainable regional and national supply chain that will require an enhanced education and training offer, providing additional indirect benefits. However, our paramount concern has been that every effort should be undertaken to ensure that a significant proportion of these benefits is localised. Typically, with significant infrastructure projects, the potential positive benefits are regionally felt whilst the negative impacts of the development are felt far more locally.

Distribution of Benefits

- 20.21. There is currently little consideration given to the differential impact that the project will have on people and localities across the area and we would like to work with SPR to understand the distributional economic and social impacts of the project and to co-develop a strategy to ensure that the potential benefits of the development are properly shared.
- 20.22. The Councils are keen to ensure that the towns and villages close to the development are able to benefit from new opportunities for training and employment. On a wider level, we are also keen to explore with SPR how the project will help to support our inclusive growth agenda and tackle challenges such as low wages and social exclusion at a local level.

Adequacy of Application/DCO

- 20.23. Volume 1, Chapter 30 of the ES provides an adequate assessment of effects, with the exception of the possible impact on tourist accommodation, the wider visitor economy and cumulative effects.
- 20.24. The promotor has not undertaken their own visitor perception survey to assess and measure the tourism related impacts of the proposed development. The reliance on desk-based research and Trip Advisor reviews of wind turbine visual impacts is inadequate and not sufficiently robust. This cannot accurately assess the tourism related impacts of the disruption caused by the offshore and onshore construction work nor can it realistically assess visitor perceptions of the completed windfarms and onshore substations.
- 20.25. The DMO survey (2019) as stated above, identified a potential net drop in visitors to the Suffolk Coast for days out or holidays of 17%. With fewer people prepared to consider visiting during the construction of the projects, fewer trips will happen and BVA BDRC's analysis indicates this will cost the tourism sector at least £24 million per annum. The findings of the DMO's survey have not been addressed within the applications.
- 20.26. The SLVIA identified significant effects from the offshore infrastructure of EA1N cumulatively with EA2 on the AONB. The AONB and Heritage Coast are designations which are currently based on the tranquillity and unspoilt nature of the area. It is this natural asset which tourists come to visit. The Councils are concerned regarding the harm caused to the purpose of the designations and the potential consequential impact on the tourist industry.

- 20.27. The Councils, based on their understanding of the timetable for the proposed construction of the EDF Energy's Sizewell C development, Vattenfall developments, proposed extensions to Galloper and Greater Gabbard windfarms and National Grid Venture's Nautilus interconnector, that there is likely to be a negative cumulative impact with EA1N and EA2. SPR do not fully consider the cumulative impact of the aforementioned projects going ahead in the same timeframe. Due to the negative impact that will be felt in terms of employment displacement and tourism we would expect SPR to seek to mitigate these impacts through their DCO and where this cannot be done, we expect SPR to propose compensation.
- 20.28. We are satisfied that the ES has provided adequate assessment of skills, education, employment and economic development, outside of cumulative impact assessments, and that through continuing development of a Memorandum of Understanding between the Councils and SPR we will continue to work in partnership to maximise the positive local benefits.
- 20.29. We also welcome SPR's involvement in the All Energy Industry Council and their commitment to deliver local content as demonstrated through their signing of the Industry Charter as part of the Offshore Wind Industry Council and the Offshore Wind Sector Deal.

Compliance with Local Policy

- 20.30. A number of potential socio-economic benefits have been highlighted above however the Councils remain concerned regarding the cumulative impacts of the projects. Local policy recognises the importance of tourism to the district economy and therefore further work is required to be undertaken by the promotor in light of the findings of the DMO survey (2019). It is essential that the cumulative impacts of the projects are adequately mitigated and/or compensated.

21. Traffic and Transport

East Suffolk Council Local Plan Policies

- 21.1. Policy SP10 'A14/A12: identifies issues regarding the capacity of roads around Ipswich, specifically the A14 between Seven Hills and Copdock interchanges. The Council states that it will work with the adjoining authorities and highways agencies to consider options to improve traffic capacity. The A12 is considered a valuable artery and essential to the economy as a tourist route and to serve the low carbon energy sector. It notes that journey times are hampered by single carriageway sections and reduced speed limits are necessary for maintaining the quality of life in local communities. East Suffolk Council supports improvements to the A12 north of Woodbridge including, as a priority a bypass or other solution for Marlesford, Little Glemham, Stratford St Andrew and Farnham. Improvements to the A12 between Martlesham and the A12 Seven Hills Interchange will be required for proposed strategic employment and housing development.
- 21.2. Policy DM20 'Travel Plans': requires new developments that would have significant transport implications be accompanied by a green travel plan to reduce reliance on motor vehicles. A condition or legal agreement will be imposed to ensure implementation of the travel plan.
- 21.3. Policy SCLP2.2: states that the Council will work with other parties in supporting and enabling delivery of key strategic infrastructure in particular:
- Ipswich Northern Route
 - A12 improvements
 - A14 improvements
 - Sustainable transport measures in Ipswich
 - Improved walking and cycle routes
- 21.4. With regard to Major Energy Infrastructure table 3.6 lists a number of relevant issues that need to be considered:
- Suitability of local roads to cope with the number and type of vehicle movements necessary for construction;
 - The agreement of dedicated routes with local community participation;
 - Need for park and ride facilities;
 - Inadequate provision of laybys on the Suffolk road network; and
 - Cumulative impact of associated growth in and outside Suffolk;

- 21.5. Policy SCLP 3.4 of the East Suffolk Council Local Plan sets out that proposals for major infrastructure projects will be considered against a number of policy requirements, including:
- Appropriate packages of local community benefit to be provided by the developer to offset and compensate the burden and disturbance experienced by the local community for hosting major infrastructure projects;
 - Appropriate road and highway measures are introduced (including diversion routes) for construction, operational and commercial traffic to reduce the pressure on the local communities;
 - The development and associated infrastructure proposals are to deliver positive outcomes for the local community and surrounding environment;
 - Cumulative impacts of projects are taken into account and do not cause significant adverse impacts; and
 - Appropriate monitoring measures during construction, operating and decommissioning phases to ensure mitigation measures remain relevant and effective.
- 21.6. Policy SCLP 7.1 of the East Suffolk Council Local Plan sets out that development proposals should be designed from the outset to incorporate measures that will encourage using non-car modes. The policy goes on to state that development will be supported where:
- It is proportionate in scale to the existing transport network;
 - It is located close to, and provides safe pedestrian and cycle access to services and facilities;
 - It is well integrated into and enhances the existing cycle network including the safe design and layout of new cycle routes and provision of covered, secure cycle parking;
 - It is well integrated into, protects and enhances the existing pedestrian routes and the PRoW network;
 - It reduces conflict between users of the transport network including pedestrians, cyclists, users of mobility vehicles and drivers and does not reduce road safety;
 - It will improve public transport in the rural areas of the District; and
 - The cumulative impact of new development will not create severe impacts on the existing transport network.
- 21.7. Policy 7.1 also sets out that development that would have significant transport implications should be supported by a Travel Plan and that for non-residential developments the need for a Transport Assessment will be assessed on a case by case basis.

- 21.8. Policy SCLP 7.2 states that proposals involving vehicle parking will be supported where they take opportunities to make efficient use of land and they include:
- The provision of safe, secure, and convenient off-street parking of an appropriate size and quantity including addressing the need for parking or secure storage for cars, cycles and motorcycles, and where relevant, coaches and lorries;
 - Opportunities to reduce the recognised problem of anti-social parking or potential problems that may arise which impacts the quality of life or vitality of an area for residents and visitors;
 - Appropriate provision for vehicle charging points and ancillary infrastructure associated with the increased use of low emission vehicles; and
 - The incorporation of sustainable drainage systems (SuDS), permeable surfacing materials and means of protecting water quality in drainage schemes should be ensured.

Other Relevant Local Policy

Suffolk County Council Local Transport Plan (LTP)

- 21.9. The energy coast is recognised in the LTP as one of the key areas for growth and development. Transport should play its part in supporting and facilitating sustainable economic growth by:
- Maintaining (and in the future improving) transport networks
 - Tackling congestion
 - Improving access to jobs and markets
 - Encourage a shift to sustainable travel option
- 21.10. The LTP plan supports:
- The challenge of maintaining the highway in a good condition
 - Seeking improvement to the A11, A12 and A14 connecting businesses and markets to each other
- 21.11. Key relevant transport issues in Suffolk are listed in the LTP as:
- A12 Four Villages Bypass
 - A12 Reliability – flooding due to climate change
 - Congestion on Ipswich Eastern Fringe including A12, A1214 and A14
 - Air Quality in Ipswich and Woodbridge

Key Local Issues

Comparison with EA1 and EA3

- 21.12. While the EA1 onshore route was longer than that proposed for this scheme, EA1 had multiple accesses spreading traffic across wide areas of the network. This project focuses all traffic on a much more limited number of roads such as the A12, A1094 and B1122.
- 21.13. For EA1 the substation was an extension to an existing site with an extant preferred heavy load route, albeit one compromised by issues on the strategic road network requiring deliveries from the Port of Ipswich to Bramford substation rather than from the south. This change in routing required temporary strengthening of the A137 Wherstead Creek bridge and significant traffic disruption to do this. EA1N and EA2 both require a new substation in a location not served by an accepted heavy load route. The Councils have advised that there is an accepted heavy load route serving Sizewell A and B.
- 21.14. The movement of wide and long loads or these in excess of 44 tonnes, not just the few special order movements (>150 tonnes) is problematic on the existing constrained local road network, particularly on B class roads where the road widths are in places less than 5.5m wide; the width considered necessary for two HGVs to pass (Manual for Streets). Highway structures on A12, A14 to Yoxford, A1094, B1069 and B1122 have not been assessed for heavy loads exceeding 44 tonnes.

Network Resilience

- 21.15. The Councils have raised concerns regarding the resilience of the highway network. The proposals rely on the A12 as the sole HGV route and most will also use the A14 to access. The main issues are:
- Closure of the A14 Orwell Bridge due to collisions or high winds resulting in traffic being diverted through Ipswich,
 - Closure of the A14 or the A12 (north and south of the A14) and lack of suitable diversions,
 - Capacity of junctions on the strategic road network, particularly if delivery of multiple NSIPs coincide,
 - Restrictions placed on the ability to maintain the highway network during normal working hours due to the higher volume of construction movements,
 - Lack of laybys or other suitable parking, rest or stop over facilities east of the A12. With the exception of the A12 north of Seven Hills the local highway

network has few laybys suitable for use by HGVs. There is only a single layby (at Eastbridge) on the combined A1094, B1122, and B1069 routes.

Local Road Network

21.16. East of the A12, except for parts of the B1122 that serve as the access to Sizewell nuclear power stations, the roads are local in nature and not designed for high levels of HGV traffic. Due to the rural nature of the area slow moving agricultural vehicles are common on all routes. Walkers and cyclists use some of the lighter traffic roads especially near the coast.

21.17. Specific issues on the proposed access routes are:

A1094

- A tourist, recreational dominated route,
- Significant lengths of speed limits, 40mph between A12 and Snape, 30mph limits through Snape and Aldeburgh,
- Narrow and winding particularly at its western end,
- A number of junctions with sub-standard visibility between A12 and Snape
- Poor horizontal visibility west of Aldeburgh,
- All except the B1121 are classed as zone distributor routes in the Suffolk Lorry Route Map. Such routes directly serve specific locations or local access routes.

B1069

- Narrow pinch points through Leiston, including a level crossing,
- No formal pedestrian crossing facilities between community to the west of the road to services on the other side e.g. Primary School,
- Narrow road <5.5m between Knodishall and A1094,
- Urban or semi-urban except for south of Knodishall.

B1122

- Despite improvements still a winding route with some junctions with poor visibility (e.g. Mill Lane, Middleton),
- Significant summer use by tourists,
- Variable speed limit along length,
- Passes through scattered communities (Theberton, Middleton Moor).

B1121

- Sharp bends in Sternfield,
- Narrow in places,
- Passes through Sternfield and Friston.

Cumulative Impact (Regional)

- 21.18. Other NSIPs likely to come forward at around the same time include completion of the EA3 onshore works and construction of Sizewell C. Due to the uncertainty of when, or indeed if any or all of these NSIPs are delivered, at what time and in which order make the Councils task of assessing the cumulative impact and ensuring that the necessary mitigation is delivered in a timely and co-ordinated manner extremely difficult. Significant residential development is also planned for the area with 2,000 homes at Brightwell Lakes at Martlesham.

Cumulative Impacts (Project Specific)

- 21.19. The impact assessment presented in the ES considers the proposed EA1N and EA2 projects under two construction scenarios:
- Scenario 1 - the proposed EA1N and EA2 projects are built simultaneously; and
 - Scenario 2 - the proposed EA1N and EA2 project are built sequentially.
- 21.20. If the proposed EA1N and EA2 projects are constructed simultaneously (Scenario 1), depending upon how contracts are let, there could be one contractor for each project, or one contractor for both projects. In addition, the National Grid infrastructure works would be completed separately by contractors appointed by National Grid.
- 21.21. The significant difference in transport terms between the scenarios are the duration of the impact of the schemes and peak HGV/worker trips. Building sequentially would generate a higher total number of trips due to the additional remediation necessary between the two projects and repeated mobilisation. Building simultaneously creates a smaller overall trip total, but a shorter duration and hence higher daily flows, and a greater peak hour impact. It is acknowledged that SPR have included data summarising the worst-case highway impacts in terms of highest maximum daily HGVs (EA1N and EA2 constructed at the same time and create the maximum total daily movements).
- 21.22. Sequential development will create fewer overall construction movements over a shorter time but higher peak movements. This will reduce potential structural damage to the highway network but increase delays and journey times. Individual development will generally result in fewer peak movements reducing congestion on peak days but increase the overall impact in terms of numbers of movements and length of disruption.

Onshore Construction – Materials and Employee Numbers – Impact on Highway Network

- 21.23. The construction and use of five new accesses and three crossing points on quiet rural roads will result in an increase in driver delay and an increase in the potential for road collisions as a result of the number of turning movements in and out of the accesses, including the potential for sharp braking as unfamiliar drivers are less likely to expect these conditions.
- 21.24. SPR has provided considerable data on the quantities of materials required, although the sources of such material have not been defined. A worst-case scenario has been assessed with 100% of HGV traffic traveling either north or 100% south of the A12/A1094 junction (26.6.1.3). The assessment indicates across the entire 36-month period (which represents the most contracted build period) for a single project:
- a peak of 210 HGV movements (note – not agreed with SCC)
 - approximately 40,000 HGV movements in total
 - a peak workforce of approximately 490 employees
 - approximately 362 peak workforce vehicle movements
 - a total of approximately 180,000 workforce vehicle movements
- 21.25. The proposals will:
- result in a significant increase in HGV movements on the A12, potentially both to the north and south of Saxmundham.
 - exacerbate pre-existing issues along the A12 route.
 - result in SPR traffic from the south traveling through the four villages (Marlesford, Little Glemham, Stratford St Andrew and Farnham, with negative impacts on air quality, noise, severance, road safety and congestion, especially the pinch point at Farnham bend where large loads manoeuvre very close to buildings.
 - increase HGV movements resulting in increased delay and reduced residual capacity on the A12, A1094, B1069, B1122.
 - add to delays where predicted future growth scenarios indicate congestion will be significant, particularly in peak periods, most noticeably the A12 at Woodbridge and to the east of Ipswich.
 - increase HGV movements along the A12, reducing the attractiveness of the route for users of sustainable transport, particularly cycling, as well as increasing severance in communities along the route.
 - reduce the attractiveness of core strategic routes, such as the A12, due to delays and longer journey times causing local traffic to switch to minor, less suitable roads.

- increase wear and deterioration of roads and structures due to the additional traffic

Capacity: Junction Modelling

- 21.26. The junctions for which transport model outputs have been provided are listed below. It is worth noting that the submission does not include any of the traffic surveys, data used to calibrate the junction models or drawings highlighting that the junction geometries used within the model are acceptable. This brings inherent risk to each model and means that the results presented need to be treated with a reasonable amount of caution, above the general risk associated with any transport model.
- 21.27. Reviewing the junction modelling the following points are noted:
- The A12 / A1094 junction is shown to be approaching capacity in the four 'with development' scenarios modelled.
 - The A12 / Ufford Road junction, whilst the junction is shown to be well within capacity, there is a noticeable increase in delay, and whilst in isolation not considered to be a significant impact, the modelling supports the theory that the development will increase delays at sidearms and accesses along the A12, increasing driver delay and frustration and the potential to road collisions.
- 21.28. The A12 roundabout junctions from Woodbridge (A1152) to Foxhall Road, are shown to be at or approaching capacity. Most notably, the development results in:
- The B1079 west approach to the A12 / B1079 roundabout reaching capacity in the AM peak hour and a 40 to 60 second increase in delay on this approach;
 - The Foxhall Road approach to the A12 / Foxhall Road roundabout junction going from being at capacity in the AM peak hour to significantly over capacity, increasing delay by approximately 150 seconds.
 - The traffic flow diagrams at Appendix 26.16 and 26.25 indicates a potential increase in vehicle movements at the B1119 Leiston town centre signal junction of between 151 and 197 vehicles. The junction is known to experience congestion and the development is likely to significantly increase delay and queuing, negatively impacting on the operation of the highway network in Leiston.

A12 Marlesford Bridge

- 21.29. Strengthening of the bridge on the A12 at Marlesford is included as an offsite highway improvement to facilitate movements by Abnormal Indivisible Loads (AIL). The promotor has not discussed this matter with the Councils, and we are unaware

of how this requirement has been identified. If such work is found to be necessary, it should be undertaken in advance of any significant construction movements to avoid disruption to a major route required for these.

Local Pedestrian Improvements

- 21.30. The embedded mitigation proposes improvements to footways in Theberton and Snape.

Theberton:

- Extension of footway on B1122 near manor cottage
- Uncontrolled pedestrian crossing from near Manor Cottages to Ivy Cottages
- Short section of footway on west side of Church Road.

Snape:

- Uncontrolled pedestrian crossing and footway outside the church
- Extension of footway outside the petrol station
- Uncontrolled crossing and footway opposite the petrol station.

- 21.31. It is noted in 26.5.1.1, 26.5.1.2 and 26.5.1 that footways are often present on at least one side of the road in many settlements (e.g. Farnham). While generally true the assessment does not state that these footways are often narrow, below the 1.5m width considered necessary in Manual for Streets for two pedestrians to walk side by side or to pass each other. In many cases the footway is immediately adjacent to the carriageway. Being linear settlements, the services that are present are often on the opposite side to many residents. This requires crossing of the road although formal crossing points are sparse.

- 21.32. PRow often start and finish at roads. Where they cross the road, this is not always immediately opposite each other and hence some use of the road network by walkers is necessary to rejoin the PRow.

Road Safety

- 21.33. With one exception, highway link studies on showed on road where the baseline collision rates exceeded the national average (B1121 links 5 and 7). The A1094 is just below the national average.

- 21.34. The junctions below were examined as collision cluster sites.
- A12/B1119 Saxmundham. Assessed in chapter 26.6.1.10
 - A1094/B1069 Friston. Not assessed further

- A12/A1094 Farnham. Assessed in chapter 26.6.1.10
- A1094/B1069/C247 Sternfield Road, Snape Not assessed further
- A12/B1122 Yoxford Not assessed further

A12/A1094 Junction Friday Street, Farnham

21.35. As set out within the consultation document:

“A total of 17 collisions have been recorded at this junction during the study period, resulting in 16 slight injuries and one serious injury. Eleven of the collisions involved vehicles turning across the path of traffic on the A12; nine of these involved vehicles turning right into the A1094 from the A12, including the serious collision, with the remaining two collisions occurring as vehicles turned right out of the A1094. Six of the collisions were rear end shunt type collisions; three within the central reserve, and three on the A1094 approach to the A12.”

21.36. Clearly the junction has a history of collisions, most notably relating to right turning vehicle movements across the A12 and it is reasonable to assume that the proposed development will further exacerbate these issues given the increase of right turn movements from A12 south to the A1094 for one project, with a peak daily increase of approximately 105 HGVs right turning at this location. As set out within the DCO submission, the proposed increased use risks a greater frequency and severity of collisions to the extent that it requires mitigation.

21.37. The mitigation proposed and included within the ES includes the following:

- A reduction in the posted speed limit in advance of the junction from 50mph to 40mph;
- Provision of enhanced warning signage to better highlight the junction to approaching drivers; and
- Provision of 'rumble strips' and associated slow markings, to provide an audible and visual warning of the hazard to approaching drivers.

21.38. The junction already has an existing high standard of signing including a speed enforcement camera, a reduced speed limit of 50mph and the visibility exceeds national guidance. The Councils are concerned about the effectiveness of the current speed limit as numbers are still regularly caught exceeding 50mph.

21.39. Localised junction modelling has been undertaken of the A12 / A1094 junction which indicates between a 100% and a 150% increase in delay for right turning traffic at the junction in the AM peak hour. The road safety poor performance is likely to be a result of difficulty for vehicles to find gaps to undertake turning movements, and this

is indicative of a junction where there is the potential for issues with capacity e.g. the delay at the junction means that drivers are undertaking risky turning manoeuvres. Further to this, the significant increase in HGVs will result in longer queues in the right turn lane as HGVs need greater gaps to undertake manoeuvres.

- 21.40. It is the Councils' opinion that more significant mitigation works are required for the junction. The increase in traffic will still mean that there will be fewer gaps for vehicles to undertake their turning manoeuvres, along with a significant increase in HGVs undertaking the manoeuvres. On top of these impacts is Scenario 1, this includes a cumulative impact assessment with both EA1N and EA2 coming forward at the same time. Appendices 26.25 provide indicative traffic flow diagrams for the cumulative impact of the two developments, these are for the combined average day of the peak, and show, if all materials were from the south a peak impact of 452 daily movements (182 cars and 270 HGVs) at the junction. This may not include the LGV movements nor potential variation in delivery profiles.
- 21.41. The Councils consider the impacts of this project on this junction in terms of road safety are the single most important transport issue arising from this project. We are yet to be convinced that the embedded mitigation will reduce this risk to an acceptable measure and the proposals are unacceptable in safety terms (NPPF p109). However, the Councils are willing to explore other options proposed by the promotor.
- 21.42. EDF Energy have previously consulted on their proposals for Sizewell C, which includes a two-village bypass of the villages of Farnham and Stratford St Andrew. The proposals include a roundabout at the A12/A1094 junction to be delivered in the early years of their programme and the Councils consider that this would resolve any concerns around the junction's historic safety record. However, there is currently no guarantee or timeline for the submission and potential subsequent delivery of their project. SPR and the Councils cannot rely on the two-village bypass being constructed in an appropriate timeframe to support SPR's proposals.

A12/B1119 Junction Saxmundham

- 21.43. Nine collisions occurred with a pattern associated with right turns out of the side roads. The number of turning movements is not expected to increase as a result of this project but the assessment does indicate some increase of traffic on the A12 and many of these will be HGVs (20% increase). Therefore, there will be an increase risk that the frequency (total numbers of vehicles) and severity (HGVs) may increase. It is noted that a minor road safety scheme was completed by the LHA at this junction.

Currently, the Councils consider the risks are not of the magnitude to require significant highway improvements.

A1094/B1121 Junction Friston

- 21.44. Due to the land rising west of this junction forward visibility for eastbound A1094 traffic turning onto the B1121 is limited. The angle of the junction also makes it necessary for vans and HGVs travelling eastbound to 'square up' to the junction to obtain visibility to the right.

A1094/B1121 junction Friston

- 21.45. The embedded mitigation consists of vegetation clearance and temporary over-run areas to allow Abnormal Indivisible Loads movement through this junction, specifically right hand out and left hand in turns to the B1069. No mitigation is proposed for the additional construction traffic going to and from AC4.

Damage Through Exceptional Use

- 21.46. Condition surveys will be undertaken by the contractor both prior to the commencement of construction and subsequently at a point close to the completion of construction to identify existing highway defects and any changes following completion of the proposed project. The methodology and scope of surveys will be agreed between the contractor and SCC prior to commencement of construction.
- 21.47. Any damage (the scope of which will be agreed with SCC and the contractor) to the highway caused by construction traffic will be repaired by the contractor or a financial contribution made to SCC to cover the cost of remedial work.
- 21.48. The Highway Authority may also accrue additional costs if the volume of construction traffic requires routine and planned maintenance works to be undertaken overnight to avoid disruption. The Highway Authority would look to recover these additional costs.

Adequacy of application/DCO

Methodology for Assessing Transport Impacts

- 21.49. The assessment methodology used within the DCO submission relies heavily on GEART assessment method. At previous consultation stages the Councils raised the use of this method as problematic given that it can often fail to fully assess the

specific transport related impacts of development. The GEART guidance is one method of analysing the impacts in terms of risks to receptors it is considered to be a coarse tool which does not sufficiently allow for factors such as junction geometry, design guidance (e.g. visibility) and most importantly the changes in traffic and driver behaviour. Assumptions made for strategic roads considered in the Design Manual for Roads and Bridges may also not be applicable to local roads which will not have been designed to such standards and are unlikely to have facilities for pedestrians found on such roads.

- 21.50. It is noted that similar concerns were raised by Highways England in their response to the similar Norfolk Boreas DCO in Table 24.4 NPS (as stated in Table 26.5) also states that transport assessments should accord with NATA/WebTAG methodology which is more transport specific than GEART.

Offshore Construction and Operational Transport Issues

- 21.51. Chapter 26.1 states that 'no decision has yet been made regarding a preferred base port for the offshore construction and operation of the proposed project. Such facilities would be provided or brought into operation by means of one or more planning applications or as port operations with permitted development rights. The EIA and TA therefore only considers the impacts of constructing and operating the onshore infrastructure, not the entire project.
- 21.52. SPR has stated that foundation components would be manufactured onshore and delivered to site as close to fully assembled as practical (paragraph 39 of Chapter 6.1.6). This also applies to the turbines and scour prevention materials, cable protection, cables and ancillary structures. Further clarity is needed in relation to this claim and whether the consequential impacts on transport have been fully assessed.
- 21.53. The ports likely to be used for offshore construction, Great Yarmouth and Lowestoft are both linked to the Strategic Road Network and are, at least for passenger traffic, part of the rail network. However, without information on the nature and scale of traffic movements associated with the offshore construction, the Councils cannot evaluate the cumulative impact of the whole project. Assessing these through one or more planning applications will create a fragmentary method of assessment and may prevent the appropriate mitigation for the cumulative impact being delivered at the appropriate time.

Road Safety

- 21.54. The inadequacy of the embedded mitigation for the A12/A1094 Friday Street junction has been discussed previously.

Speed Management Proposals

- 21.55. The embedded mitigation proposes specific changes to speed limits on a temporary or permanent basis. It is noted that temporary can mean up to the 7-year duration of the project, far in excess of the 18-month period for temporary speed restriction orders (Road Traffic Regulation Act 1984 s88).
- 21.56. The promotor has proposed a range of modifications to speed limits on the network any changes that are made to the speed camera at Farnham will have to be undertaken by Suffolk Constabulary. Any resultant costs will need to be met by the promotor through a planning obligation.

Road Closures

- 21.57. The DCO makes provision for streets to be stopped up (DCO Schedule 5) yet Table 26.4 states that no roads are to be fully closed to install the proposed cables under the public highway.
- 21.58. It is unclear if stopping up of streets is required solely for access construction. The Councils consider that for practical and safety reasons closure (or partial closure) of Sizewell Gap would not be acceptable at any stage as it forms the sole access to Sizewell B. Closures of the A12 and A1094 would only be considered if restricted to times where traffic flows are low to avoid significant disruption to road users.

HGV Access Strategy

- 21.59. Table 26.4 and the Operational Access Management Plan (OAMP) states that:
- All HGV traffic routed via A1094 or B1122.
 - No HGV construction traffic to
 - Use B1119
 - travel via Leiston and Knodishall (B1069)
 - travel via B1121 via Friston and Sternfield
 - permitted to use B1353 to Thorpeness

- 21.60. However, it is unclear if the works on Church Road, Friston and the permanent access AC6 will be accessed via internal haul roads or if some construction traffic will have to use the B1121 through Friston.
- 21.61. Access to Works Plan shows five access points
- AC1 and AC2, both with temporary exits south off Sizewell Gap and accessed via A12, B1122 and Lovers Lane
 - AC3 temporary exits west and east off B1122 Aldeburgh Road, Aldringham
 - AC4 temporary exit east off B1069 Snape Road, Knodishall
 - AC5 permanent access off B1121 Friston
- 21.62. This appears to contradict Table 26.22, figure 26.2 and paragraph 211 of the ES which indicate that only a small length of section 3 will be served by the access off the B1122 Aldeburgh Road and that most of this section would be served by an access west of the B1069 Snape Road which is not shown on the access to works plan.
- 21.63. The use of differing references to the access points within the DCO and supporting documents is confusing and appears to result in discrepancies between the documents with respect to access of work areas between the B1353 and B1069. The Works Access Plan suggests a more significant use of the less suitable access off the B1122 Aldeburgh Road rather than the B1069 Snape Road. If this is the case it undermines the assumptions made for traffic flows in the EIA and Transport Assessment.

Summary of Access Points

Location	2.4 Access Work Plan	6.2.26.2 Access Locations and Associated Onshore Infrastructure
Sizewell Gap (east)	AC1 – access south	1 – access south
Sizewell Gap (west)	AC2 – access south	2 – access north
B1353		3 & 4 – crossing north and south
B1122 Aldeburgh Road, Aldringham	AC3 – access east and west	5 & 6 – access east and west
Sloe Lane, Knodishall		7 & 8 – crossing north and south
B1069 Snape Road, Knodishall	AC4 – access west No access shown to the east	9 & 10 – access east and west
Grove Road Friston		11 & 12
B1121 Friston	AC5 – access north	13

AIL Impacts

- 21.64. Paragraph 26.4.3.1.5 implies that there would be two delivery routes for most AILs required as part of the construction programme:
- Option 1: Lowestoft. This is Highways England's preferred route (HR100) although this is dated and incorrect in some minor details. Due to restrictions, unloading would need to occur on the southern side of the lake. However, there is currently a risk that long-term access cannot be secured.
 - Option 2: Felixstowe via the A14, A12, B1122, B1069, A1094 and B1121.
- 21.65. It is noted that recent AILs have also been recently landed at Ipswich due to issues with structures on the A12 between Ipswich and the M25. Further work is still required on both routes including detailed structural assessment. Although the AIL study (Appendix 26.3) has identified that abnormal loads could come from either Felixstowe or Lowestoft, Network Rail have advised that a rail bridge over the A1094 should be avoided for special order movements. The response from Network Rail in Appendix 26.3 indicates they were only considered the specific special-order load they were consulted on. They imply that no more than 100 tonne loads can be accommodated by the A1094 rail bridge, but this is not explicit as they also state concerns regarding the condition. Therefore, it is unclear if this bridge can carry loads between 44tonnes and 150 tonnes.
- 21.66. The limits on the A1094 rail bridge will result in all special-order movements and potentially other AILs, regardless of origin, travelling via the B1122 from Yoxford and passing through Leiston along the B1069 to the junction with the A1094 where localised widening is required. From this point the vehicle would then travel along the A1094 and B1121 through Friston to access the onshore substation site over the new access road. The Police response in Appendix 26.3 raises concerns regarding parking and that the route through Leiston should avoid this.
- 21.67. The Councils note that 26.4.3.1.5 the promotor considers that it is unlikely that any future special-order movements will be required after completion. The Councils consider that this is unwise and does not consider movements required during decommissioning or if other projects come forward requiring extension of the substation. Temporary widening of the A1094 / B1069 junction only for the construction period is short sighted.
- 21.68. The Councils have significant concerns regarding the route from Felixstowe as it passes through Stratford St Andrew, Farnham, Yoxford, Leiston, Knodishall and Friston with issues such as footbridge on Park Hill, Leiston (height), pinch point on

Haylings Road, Leiston (width) and Farnham (geometry) are well known. Appendix 26.4 includes a swept path assessment of the AILs at the Farnham bend and at the A1094 / B1069 junction. The swept path assessment indicates that AILs can theoretically negotiate the Farnham bend, but with 0.2m (200mm) to spare.

- 21.69. The presence of AILs on the road network is likely to lead to substantial delays for short time periods, however the Councils are concerned that the number of AILs has been underestimated. The presence of AILs will have negative impacts including increasing driver frustration and driver delay on top of those increases associated with the more generic development traffic.
- 21.70. The promotor has not assessed all AIL movements, only concentrating on special order movements.
- 21.71. The Outline Access Management Plan (2.2.8) states the movement of abnormal loads would be outside of the restrictions (routes and times) contained within this OCTMP and should be subject to separate agreement with the relevant highway authorities and police through the Electronic Service Delivery for Abnormal Loads (ESDAL) system. The Councils would need more information on these proposals specifically the timing as we understand that Suffolk Constabulary are only prepared to move AILs in daylight hours.

Outline Construction Traffic Management Plan (OCTMP)

- 21.72. The OCTMP only considers onshore construction, not port related construction or operational traffic. The Councils consider that future planning applications should be aligned with the OCTMP so that the full cumulate transport impacts can be monitored and ongoing impacts assessed.
- 21.73. The contractors for EA1N or EA2 and the associated National Grid works have not been confirmed and may differ (8.9 OCTMP para 16 and OTP para 15). In a worst-case scenario this will result in four contractors being required to co-ordinate the Construction Traffic Management Plan(s) with each contractor required to appoint its own CTMP Co-ordinator. Although the promotor would establish the role of the Transport Co-ordinator to take responsibility for the overall implementation of the CTMP it will be difficult to manage such a disparate arrangement.
- 21.74. The OCTMP (para26) states that to secure the required performance standards it adopts a series of 'input' measures, supported by an action plan (rather than finite HGV numbers). A monitoring regime would focus on the delivery of key action plan items as a 'health check' that the contractors are achieving the required standards.

HGV traffic flow forecasts (extrapolated from the ES) are presented as a secondary monitoring indicator. The Councils consider that maximum daily and maximum peak HGV movements need to be embedded within the DCO, preferably by requirement. The daily maximum number of movements of 210 (and average movements across the life of the project).

- 21.75. The booking system for HGVs, which would require appropriate monitoring and reporting to the Highway Authority. The Councils consider that a GPS based system that can locate and track individual vehicles is a better solution enabling proactive management of HGVs, for example in the case of interruption of the highway network and provide factual data in cases where restrictions are breached.
- 21.76. Within the OCTMP it is set out that the following actions are considered to constitute a breach of the CTMP, whereby corrective measures would be required:
- Exceedance of assessed daily HGV numbers (either for individual projects or cumulative affect with EA2);
 - Construction HGV traffic operating outside of agreed hours;
 - Construction HGVs not adhering to the agreed routes; or
 - Construction HGV traffic being driven inappropriately, e.g. speeding.
- 21.77. If the breach is found to be material, a three-stage process is proposed by the promotor, that includes reviewing the data, liaison with the Highway Authority, potential identification of additional mitigation measures, potential removal of the individual committing the breach.
- 21.78. The Councils consider that monitoring and reporting outputs need to be more robust to ensure compliance with the impacts assessed and hence the EIA. These should include the following:
- Progress of the project against specific gateways;
 - Freight movement to/from the site;
 - Details of non-compliance with routing or speed limits;
 - Near misses or safety related incidents;
 - Freight compliance with appropriate exhaust emissions (Euro VI);
 - Transport of AILs to/from the site;
 - LGV movements to/from the site;
 - Employee movement to/from the site, including modal split to ensure compliance with car share targets and in combination monitoring should EA2 project be being delivered commensurately; and
 - Information on complaints received on transport related issues.

- 21.79. The Councils recommend that this is undertaken on a quarterly basis and any non-compliance reported through a Transport Review Group comprised of relevant stakeholders. Quarterly reports should be made available on a publicly accessible website.
- 21.80. The Councils consider the relevant thresholds are necessary to ensure that the impacts considered in the EIA are not exceeded and the embedded mitigation remains appropriate:
- Maximum HGV movements per day (210 single project, 270 together)
 - Maximum HGV movements per hour between 0700 and 0900 and 1600 to 1800
 - Haulage fleet to be 100% compliant with emissions requirements (Euro VI)
 - Car share measured on a monthly basis to not decreased below 1.5 workers per car
- 21.81. Prior to commencement of construction works, it is anticipated the construction contractor would record the condition of roads, tracks, land, fences, etc, by means of schedules and photographic or video surveys. The details of infrastructure (such as water pipes) collated would be reviewed in addition to a review of unrecorded services such as land drains and irrigation systems. The promotor will be expected to provide a financial contribution for mitigating their extraneous impact on the quality and structure of the highway network.

Outline Travel Plan (OTP)

- 21.82. To ensure that the final TP can be effectively enforced, it is important to define what will constitute a breach. The following actions are considered to constitute a breach of the TP, whereby corrective measures would be required:
- Construction workers overspill parking on the public highway;
 - Exceedance of assessed daily employee vehicle numbers;
 - Construction employee traffic operating within the onshore development area outside of agreed hours; and
 - Construction traffic being driven inappropriately, e.g. speeding.
- 21.83. The Councils consider that this should be part of the regular report and should include as a minimum:
- Details of non-compliance with routing or speed limits
 - Near misses or safety related incidents
 - Employee movement to/from the site, including modal split to ensure compliance with car share targets and in combination monitoring should EA2 project be being delivered commensurately; and

- Information on complaints received on transport related issues including parking.

21.84. The monthly monitoring report should be submitted to the Highway Authority and a contribution for time and costs associated with reviewing and monitoring by the Highway Authority be paid.

Obligations

21.85. The Councils consider that the following contributions are necessary to mitigate the impacts of this project. A further recommendation is that these should be secured through a S106 agreement.

- A contribution towards the additional costs resulting from routine cyclic and emergency highway maintenance costs being restricted to out of hours working times on their freight route.
- SPR will be obligated through the Outline Construction Traffic Management Plan to undertake visual and structural surveys of all routes intended to carry construction HGVs prior to, during and after the construction period and to undertake or pay for the highway authority to undertake any such work that is deemed necessary to return the carriageway to its original condition.
- SPR to pay the Councils a contribution for review of submitted materials for monitoring the CTMP.
- SPR will pay the Councils a contribution for review of submitted materials for monitoring the TP for the life of the project.
- The sum of 7.5% of the total off-site highway works on or before the commencement of construction, to be applied to cover the full audit, legal costs, S278 agreements, dedication of land into highway, land compensation events and supervision fees for the transport schemes to be implemented by SPR under the DCO.
- A contribution should be provided by SPR to mitigate their significant cumulative impact on the east of Ipswich road network.
- SPR will pay the Highway Authority a contribution towards alterations to the speed limit at the A12 / A1094 Friday Street junction and changes in the speed

enforcement equipment. The cost of temporary speed limits will be recovered by other means.

- SPR shall pay the sum to the Highway Authority on or before the start of construction such amount to be used for Leiston safety and capacity improvements to mitigate the impacts of the development along the B1122 and B1069.
- Reimburse the Highway Authority for all costs associated the moving, removing, installed and reinstalling street furniture, streetlights, traffic signals, traffic islands and all other highway infrastructure including structures necessary for safe movement of AIL's and any associated traffic management and temporary traffic orders.

Compliance with Local Policy

- 21.86. The Councils consider that the proposals are inadequate in a number of ways including:
- a) no provision for a planning obligation to cover the cost of necessary highways works;
 - b) the provisions for abnormal loads are insufficient;
 - c) the proposals to reduce the southbound A12 speed limit to 40 mph at the Friday Street A12/A1094 junction together with new rumble strips and an adjustment to the existing speed camera would not be adequate to avoid an increase in accidents and that a new roundabout is required, and
 - d) there are too many variables around other energy projects to make the assumptions reliable.
- 21.87. For the reasons set out above the proposal is not compliant with local policy.

22.Minerals and Waste

East Suffolk Council Local Plan Policies

- 22.1. Policy SP12: Climate Change, seeks to reduce waste and promote recycling of materials.
- 22.2. Policy SCLP9.2: Sustainable Construction, requires all new non-residential developments of equal or greater than 1,000sqm gross floorspace to achieve the British Research Establishment Environmental Assessment Method 'Very Good' standard or equivalent unless it can be demonstrated that it is not viable or feasible to do so. This includes the consideration of waste management.

Suffolk Minerals & Waste Local Plan Policies

- 22.3. Suffolk Minerals Core Strategy (SMCS) Policy 5 seeks to protect mineral resources from sterilisation and allocated sites from other forms of competing development. Suffolk Minerals & Waste Local Plan (SMWLP) Policy MP10: Minerals consultation and safeguarding areas, which will replace Policy 5, also seeks to do the same but extends protection to existing and planned minerals sites.
- 22.4. SMCS Policy DC2 seeks to protect sites of geological or geomorphological interest. SMWLP Policy GP4: General environmental criteria, which will replace Policy DC2, also seeks to protect geodiversity. In both cases Sites of Special Scientific Interest and Regional Important Geological sites are protected.
- 22.5. Suffolk Waste Core Strategy Policy (SWCS) WDM1: Safeguarding of waste management sites, seeks to protect existing and proposed waste management sites from other forms of competing development. SMWLP WP18: Safeguarding of waste management sites, which will replace Policy WDM1, seeks to do the same.

Key Local Issues

- 22.6. The onshore part of the development is within a Minerals Safeguarding Area the purpose of which is avoid sterilisation of minerals resources.
- 22.7. There are geological conservation sites in the area which should be safeguarded.
- 22.8. A check is required to ensure that existing or proposed waste management facilities are safeguarded from the proposed development.

- 22.9. Based on the experience of the SPR EA1 windfarm, a significant amount of aggregate is used to make temporary access roads during construction which requires removal and recycling.

Adequacy of Application/DCO

- 22.10. Chapter 18 of the ES - Ground Conditions and Contamination, includes reference to minerals safeguarding and geological conservation.
- 22.11. In respect of minerals safeguarding reference is made to the presence of sand and gravel resources being of regional importance and the reuse of minerals within the development. The ES concludes that there would be a negative impact of minor adverse significance. This is based on the fact that the mitigation embedded in the application would be sufficient to reduce the impacts from a more significant level. The level of significance however can only be known when an intrusive resource assessment of the sand and gravel within the site has been carried out.
- 22.12. It is acknowledged however that existing mapping and historical patterns of extraction within the County indicate that significant viable sand and gravel resources are not likely to be present. Parts of the cable route are also particularly constrained in terms of ever being viable minerals resources due to factors such as being within the AONB for example. Therefore, the development is compliant with SMCS Policy 5 and SMWLP Policy MP10.
- 22.13. The Thorpeness County GeoSite mentioned in the ES would not be directly affected as the cabling will pass underneath it at depth, therefore the proposal is compliant with Policies WDM DC2 and SMWLP GP4 e).
- 22.14. In respect of existing and proposed waste management none are affected by the proposed development therefore SWCS Policy WDM1 and SMWLP Policy WP18 are complied with.
- 22.15. Recent evidence suggests that local contractors are capable of taking away Type 1 aggregate used for temporary construction roads for recycling. Although not specifically mentioned in the ES this is not contrary to any SWCS or SMWLP policy and in accordance with East Suffolk Development Plan policies SCP12 and SCLP9.2. The Construction Management Plan will also include further provisions for waste management and likewise would fit with Development Plan Policy.

Compliance with Local Policy

- 22.16. As outlined within the above text, the development is considered compliant with local policy.

23. Water Quality and Resources

East Suffolk Council Local Plan Policies

- 23.1. Policy SP12: Climate Change, seeks to reduce the use of natural resources and to minimise the risk of pollution.
- 23.2. Policy SCLP9.7: Holistic Water Management, states that all new developments will incorporate water efficiency and re-use measures, inducing but not limited to:
- greywater recycling;
 - rainwater harvesting; or
 - water use minimisation technologies.
- 23.3. Policy SCLP10.3: Environmental Quality, states that development proposals will be considered in relation to their impact on water quality and the achievement of Water Framework Directive objectives.

Key Local Issues

- 23.4. Impact on the water quality has not been identified by the Councils as a likely significant effect of the development, although additional consents are relevant to this issue. As an example, Suffolk County Council is responsible for issuing Land Drainage consents under the Land Drainage Act 1991 for works affecting ordinary water courses where there is no Internal Drainage Board. In issuing consents Suffolk County Council will need to ensure that any works permitted are Water Framework Directive (WFD) compliant.

Adequacy of Application/DCO

- 23.5. Requirement 22 provides for a CoCP. The Outline CoCP includes measures to treat surface water runoff prior to discharge. However, some of these options do not use SuDS methods and rely on the use of proprietary products, as was the case for EA1 construction. It is unclear if the promotor's proposals allow for sufficient space within the red line boundary for the use of SuDS to be prioritised for the purpose of surface water treatment.
- 23.6. No measures have been proposed to re-use surface water runoff to reduce the developments water supply needs, neither during construction nor operation, contrary to local policy.

Compliance with Local Policy

- 23.7. It is likely that local policy compliance can be achieved post consent through the agreement and implementation of an appropriately detailed CoCP. The Councils would however like to see the promotor identify whether it is possible to re-use surface water runoff to reduce the water supply needs.

24.Approach to Preparatory and Construction Works in Specific Locations

- 24.1. There are specific points along the onshore cable corridor where the Order Limits are constrained and/or the construction works will occur very close to residential properties i.e. area south of Sizewell Gap Road, Hundred River Crossing and at Friston. Further work is necessary, to understand how construction and pre-construction works in these areas would be managed, to minimise harm to environmental assets and local amenity.
- 24.2. It is recommended that an additional section be included within the OCoCP and post consent within the CoCP to provide specific measures which will be utilised to manage the pre-construction and construction works within these sensitive areas. Where the onshore Order Limits are in close proximity to residential properties additional measures could be undertaken to reduce disturbance from noise and dust emissions for example.

25.Co-ordination and Cumulative Impacts

Key Local Issues

- 25.1. The promotor is bringing forward two schemes EA1N and EA2 as two separate projects that can be implemented simultaneously or in sequence. In the latter circumstance, the first scheme could be implemented, and the land restored before the second project commences, disrupting the same communities and environment again. This contrasts with the approach taken by SPR in connection with the EA1 and EA3 developments where the ducts for the second project were installed at the same time as the first project, leaving the second scheme to only need to pull cables through the ducts during implementation without having to dig up the entire cable corridor for a further time.
- 25.2. SPR has recently announced that they intend to combine, if consented, EA1N, EA2 and the consented EA3 wind farm into one single delivery programme creating the East Anglia Hub. This announcement however does not secure the simultaneous implementation of the projects through the DCOs so there is no ability for the Councils to ensure this approach is undertaken. Given this announcement we would expect greater coordination during construction for the projects in particular the first project ducting for the second project. This recent announcement also introduces the potential for cumulative impacts between EA1N, EA2 and EA3.
- 25.3. In addition to consideration of the cumulative impacts of EA1N, EA2 and EA3, EDF Energy plan to submit a DCO application for Sizewell C in the first quarter of 2020. The Stage 4 consultation documents identified 2021 as the earliest start for construction.
- 25.4. If the applications for EA1N, EA2 and Sizewell C are all consented, this would result in East Suffolk experiencing the disruption of four nationally significant infrastructure projects being constructed simultaneously. It is therefore essential that the full cumulative impacts of the projects are fully assessed with adequate and appropriate mitigation secured as required.

Adequacy of the Application/DCO

- 25.5. The Councils have continued to urge SPR to commit to a more integrated and efficient approach to developing the two projects, if consented, in order to lessen the detrimental effects which will be experienced during construction.

- 25.6. Section 1.4 of the Scheme Implementation Report (8.19) details the “Early Implementation of Sections of the Onshore Cable Route”. Requirement 11 “Stages of authorised development onshore” allows the stages of works to be approved by East Suffolk Council. It is understood for example that one project could lay the sections of ducting for another providing all the requirements in relation to both projects which would allow the works had been discharged. It is agreed that this allows flexibility and does not prevent the ability for greater coordination between the projects however this only makes this an option for the promotor and does not secure a coordinated delivery of the projects.
- 25.7. No account has yet been taken of the cumulative impacts of EA3 windfarm in addition to the EA1N and EA2 projects during construction. The cumulative impacts of the construction of these projects is therefore not yet known.
- 25.8. The submission documents acknowledge the need to cumulatively assess the projects with EDF Energy’s proposed new nuclear power station, Sizewell C. The promotor will need to update their cumulative assessment as more detailed assessments are published by EDF Energy to ensure their assessments are up to date. The current assessments are based on the material published by EDF Energy during their Stage 3 consultation. The full cumulative impacts of the projects with Sizewell C are therefore not yet known.

26.Cumulative Impacts with Future NSIP Projects

Key Local Issues

- 26.1. There are a number of additional NSIPs which are also within the pre-application stage of the consenting process. The Councils are also aware of two interconnector projects (Nautilus and Eurolink) proposed by National Grid Ventures to be connected to the National Grid around Sizewell. The Nautilus project has sought and been granted consent to be considered under the NSIP regime.
- 26.2. In addition to these projects which already have connection offers within the same locality as the current project, the extensions to Greater Gabbard and Galloper have progressed beyond the Crown Estate's plan level Habitat Regulations Assessment process and are likely to commence public consultation in 2020. Although the grid connection offers for the extensions projects have not been confirmed, it is known that the National Grid substation will be the principle determinant for the location of these schemes, given the need to achieve an efficient economic and coordinated transmission system.
- 26.3. Therefore, given the likely need for all these future projects to connect into the grid via the new National Grid substation proposed at Friston, the Councils are concerned that the full cumulative impacts of all these projects are not being considered in the assessments. It is understood that each additional connection would require further extension of the National Grid Substation with further bays. The Councils' understanding is that a substation bay consists of a combination of high voltage and low voltage switchgear, a transformer and protection and control, which together are required to connect a renewable energy generator or a distribution system to the transmission network.
- 26.4. The promotor is seeking a seven-year time limit for the implementation of the consent. This is longer than the five-year typically awarded time limit. The additional length of time applied for will increase the likelihood that the projects identified above from being brought forward within this timeframe and therefore increase the likelihood of cumulative effects.

Adequacy of Application/DCO

- 26.5. The application does not adequately address the cumulative impacts of future projects. This is of significant concern in relation to the substation site immediately north of Friston village. With knowledge that National Grid is offering connections to the Grid at this location, our concerns increase. The site is being seen by National

Grid as a strategic connection point for future projects without the potential impacts being cumulatively assessed and without any of this future development being considered within the existing masterplan for the site.

27.Planning Obligations for Mitigation/Compensation

- 27.1. SPR are of the view that they have submitted a robust application with built in mitigation to address any impacts arising and as such do not, at this time, believe additional mitigation is required. For this reason they argue it would not be appropriate to provide a Section 106 under the Town and County Planning Act 1990 as such an agreement would not be 'necessary to make the proposed development acceptable in planning terms', one of the tests set out in the Overarching National Policy Statement – EN1 (NPS EN-1).
- 27.2. The submitted applications however identify significant residual impacts as a result of the development. It is therefore the Councils view that these residual impacts should be appropriately mitigated and, if this is not possible, compensated for in line with the mitigation hierarchy which requires the promotor to avoid adverse impacts, and only if the impacts cannot be avoided should minimisation and mitigation be considered. If it is not possible mitigate the impacts, compensation should be considered.
- 27.3. SPR has however proposed agreements under Section 111 of the Local Government Act. For EA2 SPR has committed to provide funding to address a number of the significant effects identified in the ES which relate to the substation, onshore cable route and offshore infrastructure's impact on the AONB. For EA1N the promotor has committed to a s111 fund to address the residual significant effects identified within the ES which relate to the onshore substation and onshore cable route. The difference between a s111 and s106 is that under a s111 no direct link between the proposed development and the compensatory measures must be demonstrated and therefore the funding would not be a material planning consideration.
- 27.4. A s111 agreement is also not an obligation on the application land and is not therefore transferred with any change of ownership. Future transfer of ownership, of the offshore transmission infrastructure and substations is required, by the Office of Gas and Electricity Markets (OFGEM), when construction of the projects is complete. It is however understood that there are mechanisms which could be utilised to secure the delivery of the s111 agreements.
- 27.5. Notwithstanding the potential s111 agreements, it is the Councils view that the promotor should seek to address the residual impacts of the projects through a s106 which meets the appropriate tests and is directly linked back to the impacts of the projects.

28.Summary

- 28.1. The Councils have reviewed the application and evaluated the impacts in the context of local planning policy and other relevant policy, highlighting policy compliance within the different sections of the report.
- 28.2. The Councils have highlighted a number of areas where the application, as currently submitted, is not considered to be compliant with local policy. The assessment of the impacts has been topic based for ease of reference.
- 28.3. The Councils wish to highlight the overall in-combination impacts which would be experienced on the environment and community around Friston. The project alone and cumulatively would result in detrimental impacts on:
- landscape and visual amenity;
 - heritage assets;
 - noise;
 - PRoWs; and
 - Potentially flood risk.

Which when taken together, would have a significant adverse impact in respect of the sensitivity of the receiving landscape, local residents and visitors. There is insufficient commitment within the submission to secure minimisation of the scale and impacts of the substations and address the future expansions of the site. The mitigation proposals presented to date do not satisfactorily address the Councils concerns.

- 28.4. In addition to specific impacts around the substation site, other areas of concern include:
- AONB - impacts on designated landscape resulting from the offshore infrastructure;
 - Air Quality - cumulative impacts and mitigation proposals;
 - Ecology – receptors not all fully assessed or insufficient mitigation proposed;
 - Flood Risk – drainage
 - Coastal Change – impact of HDD on stability of cliffs, crag outcrop and wording of requirements;
 - Archaeology – limited level of detail
 - Landscape – impact visually and on character by virtue of loss of hedgerows/trees;
 - PRoW – insufficient assessment of impacts on amenity and quality of user experience;

- Traffic and Transport – unresolved concerns including AILs and A12/A1094 junction safety concerns;
- Socio-economic – cumulative pressures and impact on tourism following DMO survey (2019);
- Co-ordination between the projects;
- Cumulative impacts with other major development projects;
- Mitigation and compensation delivery mechanism.