



WRITTEN REPRESENTATION FOR

SPR EA1N and EA2 PROJECTS (DEADLINE 1)

CONSTRUCTION - ONSHORE CABLE CORRIDOR

Interested Party: William Halford **PINS Refs:** 20024016 and 20024017

Date: 01 November 2020 **Issue:** 1

1. INTRODUCTION

I would refer ExA to my earlier Relevant Representation in .pdf form (condensed public version [RR-388]). This Written Representation is intended to expand on that and provide further arguments and evidence where relevant and available.

In [RR-388], I expressed objections to onshore aspects the two projects will have great adverse environmental, social and economic impacts onshore at local level, including long term and cumulative adverse effects, pointing out that there is a scarcity of measures in the planning applications to avoid, reduce or compensate for those adverse effects.

I live in [REDACTED]

My primary concern is the damaging impact on our own lives during a 4 – 10 years long period of construction and afterwards following the Applicant's decision to position the cable corridor unnecessarily close to our residential titles (house and garden) and as a consequence of proposed destruction of a large area of attractive veteran woodland very close by on both sides of Aldeburgh Road, Aldringham.

Consequently, I have confined the scope of this representation to those aspects of the applications that bear on those issues. I have no doubt that other Interested Parties will have raised in their own representations fundamental issues regarding the proposals, including:-

- National Grids' offer (following Secretary of State's approval of an East Anglia ONE post consent 'Non material' Change Request) of a Grid connection in the 'Leiston Area' rather than at Bramford near Ipswich via the consented route from Bawdsey which had made provision for both EA1N and EA2.
- flawed processes employed by the Applicant in choosing a site for the three Substations, exploitation of unforeseen shortcomings of PINS Advice Note Seventeen in order to avoid taking account of the cumulative impact of EA1N, EA2 and several other projects already sufficiently advanced to be planning on the basis of a Grid connection at Friston.

I make reference below where relevant to the Applicant's DCO Submission and other documents using the EN010077/ EN010078 Examination Libraries Index, by a short form e.g. [RR-388]

I refer also to National Policy Statements (NPS) for Overarching Energy (EN-1), NPS for Renewable Energy (EN-3) and NPS for Electricity Networks (EN-5).

2. SUMMARY

- The loss of up to 2 – 3 Ha of mature and veteran woodland on land allocated to Cable Route at Section 3b in Aldringham, between B1123 Thorpe Road and Fitches Wood (to east and west of B1122) including Group TPO SCDC/87/00030, leaving only a 5 metres wide line of the existing trees as a barrier between residents in Fitches Lane and the Cable Corridor would permanently change and destroy the present wooded landscape between Aldringham Court and Gipsy Lane and would be a great loss to local habitats and natural environment.
- Such a narrow line of trees would be insufficient and vulnerable to damage or toppling from strong winds. The presently attractively wooded landscape in Aldringham on both sides of Aldeburgh Road between Aldringham Court and Fitches Lane would be lost for ever.
- The visual aspect and tranquillity of landscape across the flood plain meadows on the former River Hundred Special Landscape Area east of the Aldeburgh Road, Aldringham, a local landscape and biodiverse landscape gem largely hidden from the public road would also be lost, at least until long after construction is complete and meadowland restored.
- A 'Site Selection Report' on the reasoning for selecting the location at Access Ids 5 and 6 between Aldringham Court and Fitches Lane and through the centre of Aldringham village for the route of the cable corridors and accompanying haul roads across B1122 is absent. No alternative cable routes to Friston would seem to have been considered or evaluated.
- A report assessing the impact during construction on residential titles close to the Aldeburgh Road, Aldringham 'pinch point' crossing and other sensitive residential locations between Thorpeness and Sizewell is absent from the Applicant's submissions. My back garden in [REDACTED] is situated only 20 metres and the house itself approximately 75 metres at closest from the Construction Order Limits at the River Hundred crossing point.
- Insufficient detail has been provided on proposed cable corridor orientation and positioning within the Order Limits.
- The decision to divert cable route from the straight line between the continuation of cable route north of Thorpe Road (B1123) and Aldeburgh Road (B1122) Access Id 5 has not been justified.
- The proposed Cable Corridors would blight the attractive countryside and small rural villages through which they would pass across a delightful and attractive rural area
- The Applicant's documentation implies that the impact of construction works and vehicles (**noise, dust, vibration, light pollution**) on those living, working or studying close to the cable corridor route and CCSs would be acceptable in every respect. No credible analysis of the impact of construction works and vehicles has been provided.
- Calculations and assumptions underlying the Applicant's interpretation of BS5228 and A,B,C analysis of noise impact at domestic receptors along the cable corridor have not been made available. There is insufficient information in the report to allow us to determine if the stated noise levels have been modelled correctly. This may well have resulted in an underestimation of impact and therefore also in the requirement for mitigation.
- The daytime construction noise threshold of 65 dBA (55 dBA at the weekend) proposed by the Applicant is vastly excessive in a quiet rural area where the prevalent background noise

is approximately 35 - 38 dBA. This is unacceptable and the effect over the period of up to 7 to 10 years (both projects) would damage health and well-being of residents.

- The descriptions of impact of noise on wildlife [APP-070] ES Vol 1 Ecology Chapter 22 Ecology seem to address only a limited number of protected species at Designated Sites, not the wild life rich area of Aldringham River Hundred and the wooded areas near Fitches Lane.
- The local road network between the A12 and the coast is clearly inappropriate for use by construction traffic engaged in such a major project. That this has been recognised by the Applicant is evident in his proposals to send so many trucks and other vehicles along haul roads instead of narrow and bending B-class rural roads. The consequence would be to transfer a severe environmental blight to those homes adjacent or close to the proposed haul roads. We ask ExA to recognise that the local area cannot sustain such a burden and over so many months and years and also that the use of haul roads for such volumes instead is not acceptable.
- There are inconsistencies in the Applicant's documentation regarding Construction Traffic. A particular concern is ambiguity with regard of the use of particular sections of the haul roads by HGVs, for split loads and confusion regarding the route to section 3b.
- LGVs and worker commuting vehicles should be required in the Outline Construction Traffic Plan, Travel Plan and Outline CoCP to use existing public roads, where practicable, not haul roads passing close to residential properties.
- The cumulative impacts on Cable Route with respect to NGV Nautilus, EuroLink and other energy projects assigned a Grid connection in the "Leiston" area (Friston) have not been assessed.
- The Applicant's submission of separate DCOs for EA1N and EA2 has caused great confusion.
- There is an absence of readily accessible or prominent 'In Combination' information about the impact of both projects on business, school and residences along the cable corridors. This omission has even led to a lack of appreciation by communities and others that cable corridors combined width would be 64 metres (2 x 32 metres).
- Separate cable corridors for both EA1N and EA2 alongside each other, each up to 32m wide would form wide scar at least 64 metres wide in most sections across AONB, agricultural land and some woodland.
- A requirement to propose separate and independent applications for two wind farms has led to duplication in the outline design of the cable route.
- One damaging consequence of that decision would be massive impact on the local onshore environment, an example being the building of separate haul roads for each project.
- A proposed 7 years time limit to commence work has not been justified and is excessive. It is not acceptable that construction could continue for up to ten years, if the two projects are not implemented concurrently.
- Working hours specified in the DCO must also be applicable to construction vehicle movements.

- DCOs Article 7 - The specific assessed and inevitable nuisance(s) that this article is intended to defend should be set out here. Alternatively, if none has been assessed in the Environmental Statements as unavoidable, Interested Parties and local authorities in particular should be requested to comment on whether this Article should be deleted.
- Security light pollution especially at the several Construction Consolidation Sites (CCS) would be a blight upon the presently rural dark night-time skies.
- The great majority of the thirty-three diverted PROW sections due to be diverted are situated within Aldringham-cum-Thorpe Parish. The “temporary” closure of three PROWs in Aldringham village would badly affect footpath connections between the southern half of the village and its population centre and also with Knodishall where the local school and shops are situated.
- A Hedgerow beside one of those PROWs described by The Ramblers Association as containing a “magical tree tunnel” would be removed and another important hedgerow alongside Fitches Wood, Aldringham would also be lost.
- The cumulative impact during construction over an ‘in combination period’ of up to 10 years through excessive noise, traffic, air pollution and dust, footpath closures and diversions and loss of natural habitat on lives and mental health is likely to be intolerable, particularly at homes within say 100 metres of the cable corridors.
- In short, this area of East Suffolk Heritage Coast and inland between AONB and Knodishall/ Friston is not a suitable location for installing the onshore components of these projects. Although supportive of renewable energy and offshore wind, I object to the two projects as defined.
- However in the event that the ExA SoS is minded to recommend consent one or both applications, I request that the Applicant be required to specify in the Outline CoCPs substantial measures of mitigation to eliminate or alleviate negative impact, at least in the vicinity of my home [REDACTED].

3. PRINCIPAL MITIGATION MEASURES REQUIRED

(SHOULD ONE OR BOTH APPLICATIONS BE CONSENTED)

1. Whilst acknowledging that BS 5228-1:2009 + A1:2014 seeks to protect sensitive receptors and that there is inevitably a level of inherent noise associated with construction activities.
There are certain points along the cable route that are extremely close to the construction works, including the environs of the Aldringham cable corridor crossing. An enhanced level of mitigation must be employed to protect residents adequately and that must be addressed in the Outline COCP before approval of the DCOs.
2. The Applicant has failed to propose any physical mitigation measures such as bunds or screening for the protection of residents from noise and vibration during what may be up to a 10-year construction period, depending on the actual phasing of the two projects. Effective visual, noise and dust reduction barriers are needed between cable corridor and the boundary of those residential properties situated within say 100 metres of the cable corridor order limits. This omission must be addressed prior to consent.
3. I understand that the Applicant has been unwilling to agree to mitigation measures for noise impacting on Riverwood. He must be required to construct sound and dust barriers that effectively reduce Sound Pressure from Cable Corridor direction at rear in all parts of the residential title down to at least 65 dBA and preferably to the present daytime base level which is significantly lower. These should meet the appropriate EU standards for sound mitigation in residential areas.
4. It is likely that in addition to noise and vibration monitoring required to ensure that works are compliant with the relevant standards, extra monitoring will be required in particularly sensitive locations to inform the requirement for localised, site specific mitigation. Plans for monitoring must be addressed by the Applicant in the CoCP and before the application is given approval to proceed.
5. A comprehensive construction Air Quality Management Plan must fully address the mitigation and control of dust and diesel emissions between cable corridor and the boundary of those properties.
6. The 27.1m / 16m reduced width cable corridor(s) near Fitches Lane and Aldringham Court should be sited at least 20 - 30 metres further north within the proposed Order Limits than currently proposed. Were it/ they to be moved further north, the corridors would be more central within the Order Limits and significantly reduce the impact on residences in Fitches Lane and Gipsy Lane, while preserving a valuable 25 – 35 width strip of woodland as a barrier, all without risk to the setting of and impact on noise of Aldringham Court Grade II building.
7. The Applicant should be required to use alternative modern methods (for example infra red devices) in place of bright lighting for securing the construction sites including Cable Corridor CCS areas.
8. Consent must be on the basis that the cable trenches will be filled in as soon as possible as the cable route moves west rather than the whole length laying open for years to come. i.e. build one section at a time and re-instate.
9. The Code of Construction Practice (COCP) and Traffic Management Plan (TMP) must address the mitigation and control of all vehicles using the public roads and haul roads that may affect the day to day lives of residents close by.

10. Prompt restoration of landscape when construction completed – all haul roads and CCSs to be removed with replanting and to include re-landscaping of cable corridor between River Hundred and the western end of Fitches Lane.
11. Prompt restoration of woodland between Fitches Lane and Aldringham Court where not directly above the cabling must be stipulated.
12. We request consideration of a “trenchless” cable crossing of B1122 in Aldringham, perhaps using micro-tunnelling technology in order to maintain the single road connection between Leiston and Aldeburgh during a period of construction when roads will be overloaded with construction traffic.
13. There is a need for EMF shielding in the design for those sections of the cable corridors crossed by pavements or other public rights of way.

4. PRINCIPAL OBJECTIONS

4.1 ENVIRONMENT STATEMENT GENERAL

14. The effect on the onshore environment of two separate cable corridors for EA1N and EA2 alongside each other would be unacceptably damaging to landscape, local population and natural environment, regardless of the applicant's eventual decision on project implementation phasing.
15. The proposed design of the two cable corridors is unjustified and unsympathetic to the onshore environment and entails duplication and separation of what could have been shared components, such as cable trenches and haul roads. This duplication extends to a proposal to build separate dual lane haul roads for each project with no sharing or optimisation of cable trenching.
[Fig. 2] and [APP-038] 5.1.9 Consultation Report - Appendix 9 - Phase 4 Consultation (Part 1) (Appendices 9.1-9.13) - Appendix 9.1- Phase 4 Public Information Boards Display Board 2.

4.2 DRAFT DCOs

16. The submission of separate DCOs for EA1N and EA2 has caused considerable confusion in the local communities.
17. The applicant has not justified his application, [APP-024] PART 5, Clause 19, for a 7 years time limit for commencement of work on both or either project(s). This is an unreasonably long timescale. EA1N and EA2 have been submitted as two separate planning applications and no project timing interdependency has been declared. A three year time limit would seem more reasonable for all parties.
18. *Regarding [APP-024] PART 2 Principal Powers article 7 'Defence to proceedings in respect of statutory nuisance', NPS EN-1 paragraph 4.14.3 states that "the IPC (decision taker) may disapply this defence having regard to "whether any particular nuisance is an inevitable consequence of the development".*
The specific assessed and inevitable nuisance(s) that this article is intended to defend should be set out here. Interested Parties and the local authorities in particular should be requested to comment on whether this Article should be deleted if no such particular nuisance has been assessed in the Environmental Statement as unavoidable.
19. The Draft DCO as specified has unusually and inexplicably excluded construction-related traffic movements from any working hours provision. Paras. 23. and 24. of the Draft DCO should be amended as follows: Construction work **and any construction-related traffic movements to or from the sites** must only take place between 0800 hours and 1600 hours Monday to Friday, with no activity on Saturdays , Sundays or bank holidays, except as specified in paragraph (2).

4.3 PROJECT DESCRIPTION AND SITE SELECTION

4.3.2 Site Selection - Cable corridors through Aldringham Section 2 (west) and Section 3b

20. The proposed cable route crosses an attractive section of the former Aldringham River Hundred Special Landscape Area (SLA) and passes through the North/South midpoint of Aldringham village [MAP-7] not south of Aldringham as the Applicant would appear to believe and has stated, for example in [AS-036] 3.2 Applicant's Comments on Applicant's Comments on Relevant Representations Volume 3 Technical Stakeholders Relevant Representation pages 64, 68, 207 and 249
21. The southern part of the Aldringham village would effectively be separated during construction by a double cable corridor, necessitating long PROW diversions and road diversions as not yet specified.
22. The Applicant has failed to publish a Site Selection Report on the reasoning behind selecting a location between Aldringham Court and Fitches Lane (Access Ids 5 and 6) to construct the cable corridors and accompanying haul roads across B1122. There is no evidence that alternative options have been considered or evaluated. In contrast to SPR's failure to consult with the community on this key decision, National Grid Ventures (NGV), has been investigating carried out preliminary consultation on the feasibility of a number of alternative cabling routes from the coast to the National Grid at Friston for its proposed Nautilus Interconnector project. [Fig. 1]
23. The proposed positioning of Construction Consolidation Sites (CCS) may have been a factor in the Applicant's decision on cable route, but the rationale for their proposed locations is not documented.
24. In deciding on this route, the Applicant has not acknowledged the extent of River Hundred flood plain at this crossing point (Flood Zone 3) across which the proposed cable corridors would have to be constructed. [MAP 6]
25. SPR did not apply a minimum 'distance from human habitation' criterion or buffer when positioning the cable corridors.
26. 6.3.4.2 Onshore substation Site Selection RAG Assessment [APP-443] stated that the process of the onshore cable corridor routeing would be captured in a separate subsequent cable routeing 'optioneering' exercise. The Applicant has not provided a report on cable route options at the Aldeburgh Road, Aldringham 'pinch point', other than the following
 - 6.1.4 Environmental Statement - Chapter 4 - Site Selection and Assessment of Alternatives, [APP-052] in 4.9.2.2 Constraints Mapping and Engineering Feasibility, para 171 states "Routeing across the woodland (and identified removal of trees) to the west of Aldeburgh Road is the only identified location where the cable route can cross Aldeburgh Road".
 - 4.9.1.3.4 of [APP-052] states at 146 that: "Following an 'engineering feasibility review', it was deemed feasible to cross Aldeburgh Road if woodland was removed immediately west of Aldeburgh Road, north of Fitches Lane. Early engineering work has allowed the Applicant to commit to an onshore cable route width of 16.1m (for the proposed East Anglia ONE North project only) or 27.1m total width for both the proposed East Anglia ONE North and East Anglia TWO projects at this location."

Prior to that decision, the minimum width required for both wind farms had been specified as **50 metres**.

27. The Applicant has neither published that 'Engineering feasibility report', nor evidence regarding the feasibility of other potential crossing points that could have become viable options following that 46% reduction in the width requirement to only 27.1 metres.
28. 6.1.4 *Environmental Statement - Chapter 4 - Site Selection and Assessment of Alternatives* [APP-052] in para 4.9.2.1 (165) lays out a number of relevant selection principles:-
- a) *Avoid residential titles (including whole garden) where possible;*
 - b) *Avoid direct significant impacts to internationally and nationally designated areas (e.g. SACs, SPAs, and SSSIs etc.);*
 - c) *Minimise significant impacts to the special qualities (LDA 2016) of the Suffolk Coast and Heaths AONB (Appendix 4.3 and discussed in Chapter 3 Policy and Legislative Context and Chapter 29 Landscape and Visual Impact);*
 - d) *Minimise disruption to landowners, services, road users and residents generally, prioritising voluntary (rather than compulsory powers of) acquisition and minimising disruption during construction;*
 - e) *Minimise interaction with mature woodland;*
 - f) *Avoid physical interaction with land and assets owned by EDF Energy to reduce consenting and land transaction risks associated with interfering with a statutory undertaker and nuclear operator's rights;*
 - g) *The onshore cable corridor / route (and therefore consideration of onshore substation(s) and landfall siting) should be kept as straight and as short as practicable;*
 - h) *Minimise the number and length of HDDs (see Chapter 6 Project Description for further details);*
 - i) *Minimise the number of crossings of assets (e.g. utilities) (assessed on a case-by-case basis); and*
 - j) *All other policy and environmental constraints considered on a case-by-case basis (with consideration of appropriate mitigation).*
29. The choice of the B1122 crossing point chosen between Fitches Lane and Aldringham Court does not satisfy requirements d), e) and g) above as discussed below.
30. EN-1 5.3 Biodiversity, 5.3.14 Ancient Woodland and Veteran Trees states "*The IPC should not grant development consent for any development that would result in its loss or deterioration unless the benefits (including need) of the development, in that location*" outweigh the loss of the woodland habitat.

No justification has been offered for the decision to destroy areas of woodland both sides of the Aldeburgh Road, Aldringham, contrary to its stated Cable Route Design Principle as listed above e) "Minimise interaction with mature woodland".

Through not publishing a report on the feasibility of other crossing points, the Applicant has not provided justification for or stated alternatives to the proposal to destroy this area of mature woodland on both sides of the Aldeburgh Road, Aldringham. SPR has stated that only a narrow (approx. 5 m wide) band of trees is to be retained between Fitches Lane, Aldringham and the Cable Corridor/ Haul Road construction area. [APP-052] 6.1.4 *Environmental Statement* 4.9.2.2 (171). I do not believe 5 metres width is not adequate to provide residents in Fitches Lane with sufficient visual, noise, vibration and dust screening.

Re: NPS EN-1 5.6 Dust, odour, artificial light, smoke, steam and insect Infestation, 5.6.7 states "*The IPC should satisfy itself that: an assessment of the potential for artificial light, dust, odour, smoke, steam and insect infestation to have a detrimental impact on amenity has been carried out; and - that all reasonable steps have been taken, and will be taken, to minimise any such detrimental impacts*", and :

31. Re: NPS EN-1 5.11 Noise and vibration,

5.11.4 requires a prediction of how the noise environment will change with the proposed development;

- in the shorter term such as **during the construction period**;
- in the longer term during the operating life of the infrastructure;
- at particular times of the day, evening and night as appropriate.

5.11.1 “Excessive noise can have wide-ranging impacts on the quality of human life, Health”.

5.11.2 “Noise resulting from a proposed development can also have adverse impacts on wildlife and biodiversity”.

“Factors that will determine the likely noise impact include:

- the proximity of the proposed development to noise sensitive premises (including **residential properties**, schools and hospitals) and noise sensitive areas (including certain parks and open spaces);
- the proximity of the proposed development to **quiet places** and other areas that are particularly valued for their **acoustic environment** or
- **landscape quality**; and
- the proximity of the proposed development to designated sites where noise may have an adverse impact on protected species or other wildlife”.

There is no evidence that the above EN-1 5.6 and EN 5.11 factors above have been considered or evaluated in selecting this crossing point.

32. The route proposed for the cable corridor crossing at Aldeburgh Road, Aldringham is sited unacceptably close to residential properties in Fitches Lane (only 5 metres from Fitches Lane itself), Gipsy Lane and in Aldeburgh Road. [APP-011] 2.3.2 EA1N Works Plans (onshore) Sheet 5 of 12]
33. The Applicant has omitted to specify in his plans even approximate positioning for the Cable Route and Haul Roads at the Aldringham B1122 pinch point on the Aldeburgh Road. He has not even provided any indication of orientation, for example: which of Haul road or Cable laying would be the closer to sensitive receptors along Section 3b at Fitches Lane, Gipsy Lane and along section 1 from Thorpeness to Sizewell Gap. That information must not be withheld until a post-consent ‘micro-sitin’ stage. The uncertainty has been a great cause of worry for residents and ExA cannot assess impact on residents so long as that information is not made available.
34. The Applicant has chosen to divert Cable Sections 3b and 2 by at least 200 metres to the south rather than to follow a direct SW- NE straight line between the cable routes north of Thorpe Road B1123 and Aldeburgh Road B1122 Access Id 5. This route would cause long term despoiling of a central feature of the former Aldringham River Hundred Special Landscape Area (SLA) and has led to Works No.19 and the cable corridor being as close as 20 metres distance from a rear garden in Gipsy Lane. This decision is contrary to the stated Cable Route Design Principle g) that cable corridor / route should be kept as straight and as short as practicable. No satisfactory explanation has been provided. This decision is contrary to the stated Cable Route Design Principle g) cable corridor / route should be kept as straight and as short as practicable. [APP-011] 2.3.2 EA1N Works Plans (onshore) Sheet 5 of 12].
35. The southern boundary of Aldringham Court’s grounds is situated approximately 93 metres north of Fitches Lane. The Applicant proposes a reduced width cable corridor (16.1 metres wide) north of Fitches Lane (or 27.1 metres wide should both EA2 and EA1N be consented). The southern boundary of the cable corridor Order Limit could therefore be sited at least say 30 metres north of Fitches Lane, thereby reducing disturbance to local residents and protecting a large area of woodland with no risk to the setting of Aldringham Court GII building, as stated above - PRINCIPAL MITIGATION MEASURES.

36. The Applicant has not published a report on the impact on residential titles close to the Aldeburgh Road, Aldringham, the 'pinch point' crossing, nor at other sensitive residential locations in Sizewell.
37. In short, we can find no evidence that the Applicant has properly considered the feasibility of alternative and possibly more suitable B1122 crossing points further north or south.

4.4 OTHER PROJECTS AND PROPOSALS

38. The submission of separate DCOs for EA1N and EA2 has caused great confusion. There has not been an 'in combination' assessment of the impact of both projects at places along the cable corridors.
39. The Applicant proposes to build one or both projects as a separate discrete entity and has not made any attempt in the Cable Route design to share components or land.
40. The Applicant describes in [APP-453] 6.3.6.4 Environmental Statement - Appendix 6.4 – Cumulative Project Description, Page 4 :

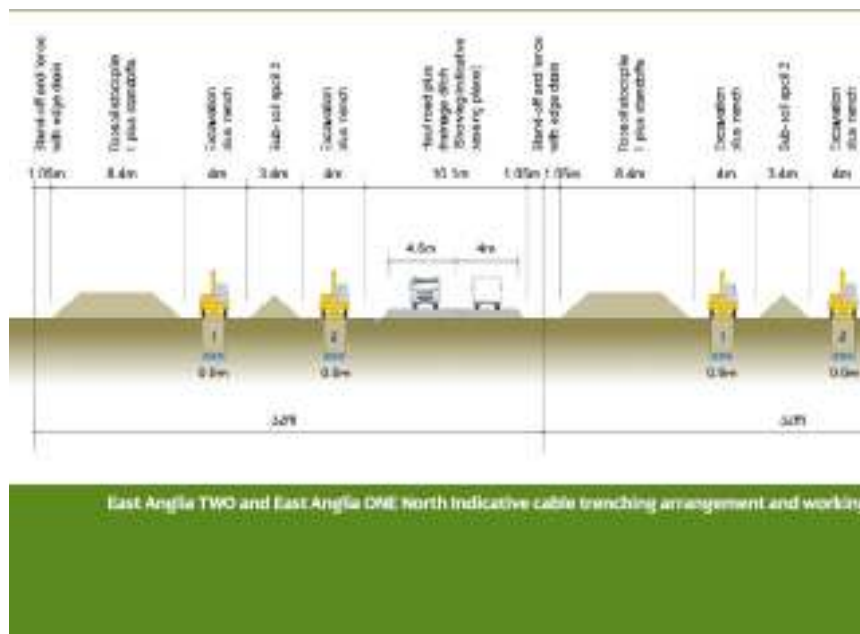
Scenario 1 : EA1N and EA2 constructed concurrently :

"Construction activities would be undertaken within a temporarily fenced strip of land, known as the onshore cable route width, which would generally be no wider than 64m".

Scenario 2: EA1N and EA2 constructed sequentially :

'Assuming for example that that EA1N project is constructed first, then the proposed EA2 project would also have a similar onshore cable route width (32m), with a cumulative width of 64m'.

41. Along the cable route, this would mean two 32 metre wide cable corridors, each with its own two-way haul roads side by side. That would take out a 64 metres wide tranche of land, equivalent in width to almost three dual lane motorways side by side. Land use would potentially be doubled should both projects be consented.



42. PINS is being asked to recommend consent to a two phase programme, each to commence within 7 years from consent. If both projects are consented, a worst case scenario would be that the second project commences up to 7 years after first. Up to 9 or 10 years of the lives of residents would be blighted by construction noise, traffic, dust, light pollution, some from works as close as 20 metres distance or less from their properties. This is unacceptable to human health and to the onshore environment, doubling the destruction of landscape and woodland.
43. The failure to publicise the approximate position of the cable corridors between Fitches Lane and Aldringham Court, Aldringham and the Applicant's decision that only 5 metres of existing woodland would be retained between Fitches Lane and Aldringham Court leads one to the conclusion that the Applicant wishes to align the route as close as possible to homes in order not to 'sterilise' a route that other Developers such as NGV might also wish to use (a commitment sought by PINS at a S51 meeting with HM Planning Inspectorate on 25 March 2018). [Ref.] :-
<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010077/EN010077-Advice-00015-1-EAST%20Anglia%20ONE%20North%20Meeting%20Note.pdf>

Were that to be the case, it would be evidence in support of the argument that the Applicant should have addressed the cumulative impact of EA1N, EA2 and Nautilus on the basis of what is already known.

4.5 LANDSCAPE AND VISUAL IMPACT

44. The destruction of the presently attractively wooded landscape along Aldeburgh Road between Aldringham Court and Fitches Lane is a major concern.
45. Destruction of visual aspect and tranquillity of landscape on the flood plain meadows in the Aldringham River Hundred former SLA east of the Aldeburgh Road, Aldringham. No SLAs have been listed in East Suffolk District Local Plan recently adopted (23 September 2020). However, the landscape qualities that led to this SLA being listed in the previous Local Plan have not changed over recent years. [MAP 1] [MAP 2] [MAP 3] [Photo 1]

The woodland on both sides of B1122 and along the banks of the R. Hundred have been designated by Natural England as 'Priority Habitat Deciduous Woodland [MAP 8]

46. The Applicant must be required to apply at least as much care and attention in its final Landscape and Ecological Management Plan as for the Friston Substations site.
47. On completion, the Applicant must be required to remove all temporary haul roads in sections 2, 3a and 3b. [APP-307] 6.2.26.2 Environmental Statement - Figure 26.2 - Access Locations and Associated Onshore Infrastructure
 These may otherwise be used for anti-social and other purposes damaging to the environment.

4.6 CONSTRUCTION NOISE (CABLE CORRIDOR)

4.6.1 Methodology used by Applicant to assess noise impact

48. The Applicant asserts that the limiting level of noise generated by construction activities at the designated receptors should be 65 dBA. No rational explanation has been provided as to why this level has been adopted other than citing BS 5228 Categories.
49. The Applicant fails to point out (to the lay reader) that 65 dBA is an LAeq figure over a specific time duration. The effect upon those living in close proximity is that this approach allows

periods of greater noise to be offset by periods of lesser noise. Periods of >75 dBA would not be unexpected, and might be acceptable, but not every weekday and Saturday over so many months and years.

50. The Applicant has noted that prevailing daytime noise is in the region of 35-45 dBA. A 65 dBA level is thus a considerable increase on what is the normal rural background experienced at nearby residential properties. 65 dBA is generally accepted as the level where unwanted background noise transitions from "irritation" to "annoying".
51. Put into perspective, 65 dBA is the level of noise experienced from one 5 tonne, 30 kW diesel engine excavator (see BS 5228-1:2009 -Table C.4 Ref No 68) or a diesel powered lighting generator running all day in the garden. Residents would be forced to close windows all day and stay out of their gardens in order to limit the impact of noise. The Applicant's formulaic approach to noise assessment therefore disguises the real impact on residents' lives. BS 5228 suggests 55 dBA as a more appropriate level when earth moving activities are likely to exceed 6 months duration, which may be the case along the cable corridor.
52. In ES Vol 1 Chapter 25 Tables 25.13 and ES Vol 3 Appendix 25.4 the Applicant has listed the plant type and number but has given no indication of their physical disposition. The relevant acoustic signatures for the items of plant may be obtained from BS 5228. However, It is not possible to independently verify the suggested noise levels that would be experienced at the listed receptors without this information.
53. The Applicant refers to BS 5228 as providing the methodology to estimate likely noise levels at specific receptors and it appears has made use SoundPLAN software. There has however been no disclosure of the results in detail, its workings or limitations.
54. The Applicant has declined when requested to publish noise contours for cable corridor construction sections close to sensitive receptors stating that "It is not a requirement to do so". [Ref. 1]
55. There should be full disclosure of the method and calculations used by the Applicant to support his assertion that the effect upon nearby residents is "Negligible"

4.6.3 Existing background noise level at Riverwood, Gipsy Lane

56. The Applicant conducted baseline survey measurements along the cable route at receptors CCR1 – CCR17. [APP305] The Noise Monitoring Survey Sensitive Receptor Location CCR9 in Gipsy Lane was set in the wrong place. Its coordinates (X 644739, Y 260394) are on the west side of the sensitive receptor (the house called Riverwood). By far the greatest source of construction noise from these projects would be from cable corridor / haul roads on the east side and from the River Hundred crossing area on the north side.
57. Base level readings at receptor CCR9 were not measured at the 'Sensitive Receptor' location previously agreed with the Local Planning Authority, but instead at a busy roadside on the Aldeburgh Road, thereby invalidating the Base Level data presented in ES Vol 3 Appendix 25 [APP-524]. Those readings as presented by the Applicant are not credible. Had they been taken at the specified locations, the baseline readings would have been very much lower.

4.6.4 Applicant's Predictions of how the noise environment will change

58. It is not stated which of various noise and vibration sources along the cable route have been taken into account in the modelling carried out by the Applicant. This is a particular issue at CCR9 in Gipsy Lane where all of the following would be possible and from three directions:
- Construction plant activity along cable corridor and at road/ river crossings
 - HGV and LCV traffic on public roads
 - HGV and LCV traffic on haul roads
59. No account seems to have been taken of the passage of tipper trucks along haul roads, noise arising from the loading of such vehicles, or of the discharge of load such as MOT 1 aggregate.
60. I am concerned regarding the adequacy of the Applicant's noise assessment which I suspect underestimates the construction noise at certain receptors along the cable route and at CCSs. It is not possible to provide evidence owing to the non disclosure of the Applicant's assumptions regarding sources of noise nuisance, or his workings and calculations.
61. We suspect the Applicant has not taken account of three additional factors in its 2018 modelling near CCR9, CCR10 and CCR11 :-
- Construction Noise and Vibration at residences in Fitches Lane and Gipsy Lane due to vehicles queuing, crossing or turning at B1122 accesses 5 and 6 - a mid 2019 design change.
 - Where the cable route crosses the River Hundred, the use of diesel engine powered pumps running on a 24 hour basis may be necessary to avoid flooding. The noise generated by such pumping arrangements is very difficult to suppress.
 - Works and transport movements at CCS near Fitches Lane - a mid 2019 design change.
62. Along the Cable Corridor, 'Medium Sensitivity' receptors CCR1-CCR19 are predicted various maximum noise levels between 48.8 and 64.6 dBA. CCR2 at 64.6 dBA is just below the 65 dBA threshold, yet the Applicant assesses the impact significance at CCR2 (and indeed at all CCR locations) to be "**negligible**". This assessment by the Applicant is simply not credible.
63. The Applicant states that CCR9 in Gipsy Lane is a Category A receptor with predicted construction noise at CCR9 of **54.6 dBA** (Daytime and Weekends).
64. The Applicant has specified the level of noise generated at 10 metres from source by the various types of construction plant and machines that it intends to use as being in range LAeq 75.5 to 94 dB.
65. If one assumes average noise generated during construction from **one** typical item of machinery is, let us say, circa **85 Db** at 10 metres from source, may apply the Inverse Square Law: Doubling of distance from source to receptor reduces sound pressure level by 6 dB).
66. Through applying the Inverse Square Law, noise level received at a receptor can be reduced by approximately $dL = 20 \times \log[(\text{distance in metres of receptor from source}) / 10]$.
Ref. https://www.engineeringtoolbox.com/inverse-square-law-d_890.html
67. Results from this calculation my home are shown below in Table 1.

Table 1: Estimated Sound Pressure - Riverwood, Gipsy Lane, Aldringham

Location* of plant or vehicle transmitting noise	Receptor location	Distance (metres)	dL	Estimated. sound pressure at receptor (dBA)
* Assuming source of noise (single vehicle or plant) is situated 5 metres inside Order Limit				
Cable Corridor, at the point closest to Riverwood	Riverwood - garden boundary at River Hundred	25	8.0	77
Cable Corridor, at the point furthest from Riverwood	Riverwood - garden boundary at River Hundred	70	17.0	68
Cable Corridor, directly opposite rear of house	Riverwood - Rear side of house	75	17.5	68

68. Factors that might be expected to further increase the noise at receptor beyond that calculated above include:

- during construction one would might expect to hear more than one item of machinery and/ or lorry operating at any particular time, when resultant sound pressure would be even greater.
- The cable corridor at Work No 19 is to be constructed on an upward sloping valley meadow.

69. The Developer states the Threshold Value at a Category A receptor is 45 dB Night time, 55 dB evenings and weekends, 65 dB day time and Saturday morning.

Therefore, the results from the Table above indicate that according to ES Vol 1 Chapter 25 [APP-073] Table 25.10, the Applicant's Assessment of Construction Noise during day time and Saturday working at Riverwood and in its gardens at rear should be as follows:

- Impact Magnitude HIGH IMPACT
- Impact Significance MAJOR

(not as stated by the Applicant : NO IMPACT - NEGLIGIBLE/ MINOR significance).

70. There are other specific locations along the onshore order limits where residential, business and educational properties sit in close proximity of the cable corridor Order Limit.

4.6.5 Conclusions

71. Residents who live close to the proposed cable corridor and its haul roads are entitled to continue to enjoy the present tranquillity of their homes and gardens without unacceptable noise intrusion during the construction phases.
72. Setting maximum limits of noise as 65 dB(A) daytime and 45 dB(A) night time is arbitrary. 30 dBA is the generally accepted background night time level in quiet rural settings. This must be addressed and mitigated if the application is allowed to proceed.
73. SPR seem to have concluded that 65 dB(A) is an acceptable limit for daytime construction noise. In choosing a daytime noise threshold of 65 dBA (55 dBA at the weekend), SPR is asserting that noise impact at 31 sensitive receptors sites bordering the construction corridor would have either negligible or minor impact on residents. This is unacceptable and demonstrates a lack of understanding of the nature of sound propagation in the countryside. It seems to ignore the much lower levels of background noise in this normally tranquil rural area of the countryside.
74. The level of noise at Riverwood received from plant and vehicles along the Cable Corridor would be unacceptable without significant measures to mitigate its effects – see sections 4.6.4 and 3, paras 2 and 3 above.
75. Concerns were raised during Consultation about the possibility of weekend working and the effect of construction noise and vibration on home life. Weekend working is not acceptable owing to the close proximity of local housing and must not be allowed if the DCO is approved.

4.7 Dust and particulates

76. The sandy topsoil along the cable route is in one of the driest areas of the country. The top soil at the East Suffolk Sandlings has the finest granularity in the UK and is very susceptible to wind entrainment as is commonly seen locally. Strong coastal winds are also prevalent in this area. Construction mechanical diggers and other machinery are most likely to cause nuisance to human receptors as we understand was the case at Bawdsey where the same Applicant has previously constructed an East Anglia ONE cable corridor and where it is understood that the Air Quality Management Plan in practice did little to protect residents (for example at Landfall) from undue pollution with dust. At Riverwood we are particularly exposed when the wind is from the east.
77. The construction will result in stockpiled top soil and uncultivated areas of land along the length of the cable route. All will be prone to wind blow unless protected.
78. The proposed increase in HGV and LCV traffic will inevitably lead to greater air pollution.
79. The IAQM guidance (IAQM 2014) states that a Detailed Assessment is required where there are human receptors within 350m of the site boundary and/or within 50m of the route(s) used by construction vehicles on the public highway, up to 500m from the site entrance(s). We have not found that assessment with these applications.
80. The Applicant has not provided an assessment of what would be an unacceptable impact on nearby residential titles (including Gipsy Lane) from Construction Phase dust and fine particulate matter resulting from emissions from vehicles queuing, crossing or turning at B1122 accesses 5 and 6.

4.8 Light Pollution

81. The entirety of the cable route would be in dark sky rural areas, even where it passes through villages. There will be significant light pollution during construction, given the “dark skies” of the present rural environment, particularly at construction compounds.
82. The Planning Inspectorate ‘Scoping Opinion’ response to SPR’s Scoping Report of November 2017 registered concerns about the risk of unnecessary illumination in areas that currently enjoy darkness. Concerns about light pollution have been repeatedly expressed by communities during consultation. These concerns have not been satisfactorily addressed in the applications..
83. Should construction between 7:00 am to 7:00 pm be permitted, there would be significant daytime light pollution during Autumn, Winter and Spring.
84. 24-hour security lighting is proposed at the large construction compounds (CCSs) of which several would be sited along the cable route. All of this will cause massive light pollution over several years during construction. The Application does not recognise the effect on local wildlife or that it will trigger certain types of lighting at random times during the hours of darkness.
85. It is improbable that power for such lighting can be supplied from the electricity mains and therefore it seems likely that SPR will employ a series of stand-alone generator / lighting sets along the entire length of the cable trench and haul road, and the exits to public highway.
86. Continuous artificial lighting for security and other purposes is not acceptable. The Applicant must be required to use alternative modern methods (for example infra red devices) for securing the construction sites including Cable Corridor CCS areas.

4.9 High Voltage AC Electromagnetic Fields (EMF)

87. The Applicant’s design does not address the need for EMF shielding for pedestrians walking along the roadside pavements directly above High Voltage cables at cable swathe crossing places near Gipsy Lane and PROWs. (NPS EN-5, 2.10.12)

4.10 Biodiversity, Ecology and Natural Environment

88. Up to 2 – 3 Ha of mature and veteran woodland on land allocated to Cable Route at Section 3b in Aldringham, between B1123 Thorpe Road and Fitches Wood, including Group TPO SCDC/87/00030 would be felled and lost for ever. **[MAP 3] and [MAP 8]** Priority Habitat Deciduous Woodland – Aldringham (Natural England)
89. Regarding SPR’s proposal to remove large numbers of trees adjacent to and to the north of Fitches Lane, Aldringham, SPR has informed the community that it plans to leave untouched only a 5 metres wide line of the existing trees as a barrier between residents and its Cable Corridor. **[APP-052] 6.1.4 Environmental Statement 4.9.2.2 (171)**. Such a narrow line of mature trees may be much more vulnerable to damage or toppling from strong wind than the present much larger and well established woods and existing roots are likely to have been severely damaged through the Contractor’s felling and excavating operations.
90. We have not found an ecological evaluation by the Applicant of those parts of cable route sections 2 and 3b falling within the former Aldringham River Hundred Special Landscape Area within the two Applications.

91. A large and prominent mature oak tree at map coordinates (Easting 644784 Northing 260497) is close to the centre of proposed cable corridor route at Aldringham. It has girth 369cm and estimated age 200 years. It is surprising that it has not been identified with a Target Note Reference in the Environmental Survey. **[PHOTO 2]**
92. The loss of important habitat TN162a described by the Applicant as having 'more open spaces with bramble, bracken, gorse with fallen trees/logs present, an optimal reptile habitat mosaic with hibernation options, moderate to high bat commuting/foraging habitat and oak, silver birch, hawthorn, gorse and holly, creeping willow, laurel and horse chestnut'.
[APP-503] 6.3.22.3 Environmental Statement - Appendix 22.3 – Extended Phase 1 Habitat Survey (Part 1 of 2)
93. Loss of important habitat TN163a species described by the Applicant as 'being a poor intact hedge with hawthorn, bramble, holly, cleavers, nettle, hedgerow crane's-bill, lords and ladies'.
94. The Applicant does not seem to have been prepared to commit to replanting those areas of woodland north of Gipsy Lane and east of Aldeburgh Road, Aldringham that are not directly above the cables and that are to be removed to facilitate construction of haul roads and other (non-cabling) purposes.

4.11 PROWs and Hedges

95. The Cable Corridor route from landfall at Thorpeness through to Friston contains 26 Public Rights of Way, many across Suffolk Coast & Heaths AONB. **[MAP- 4]**
96. This small area of heritage coast is almost certainly unique in the whole of Suffolk in having so many footpaths and bridleways in such a small area of countryside. They are used by local people and visitors to the area, being a major element in the attractiveness of the area as a holiday destination.
97. Footpaths are essential to tourism and the draw of the AONB and Suffolk Coast is the ability to roam and explore the unique landscape. We are looking at possibly 7+ years of unknown disruption from the cable route with unquestionable disruption to the Sandlings Walk, other PROWs and coastal footpaths. Assuming the worst-case scenario, if peak construction occurs during the peak holiday periods, traffic and congestion will be a big problem and disruption caused by footpath closures and diversions could effectively make much of the coast a no-go area at certain times.
98. The Applicant proposes the extinction of two PROWs and the temporary diversion of thirty-three sections of others. **[APP-581]** 8.4 Outline Public Rights of Way Strategy. It is noteworthy that is approximately the same number of diversions as SPR closed on a route four times as long between Bawdsey and Bramford during construction of East Anglia ONE Wind Farm.
99. The many closures and "temporary" diversions proposed are further reason that the cable route chosen by the Applicant would not be acceptable to the local communities.
100. The large number of footpaths and other Public Rights of Way in the area provide an important asset, enjoyed by tourists and local people alike. The proposed indicative cable corridor would cut across several public footpaths and bridleways. Such footpaths (or if necessary detours close-by) must remain open throughout the period of construction.
[APP-013] 2.5 Temporary Stopping up of Public Rights of Way Plan] and **[APP-014]** Permanent Stopping up of Public Rights of Way Plan:
101. Of particular concern are :
 - the beautiful rural footpath from Fitches Lane, Aldringham through to Knodishall (E-260/007/0)

- part of the footpath connecting St Andrews Church, Aldringham to Aldringham Common near The Old School House (E-106/065/0)
- the footpath connecting the southern area of Aldringham with the village's population centre (E-260/030/0).

These PROWs are in daily use and are a major attraction to visitors to the East Suffolk Heritage Coast. The many blockages and long diversions proposed by the Applicant will cut Aldringham into two separate parts. People will have to drive to other parts of the village instead of walking.

102. Other concerns are:

[APP-020] 2.10 Important Hedgerows and Tree Preservation Order Plan

- Destruction of section CS19-CS20 of Hedgerow 20 beside PROW path E-106/065/0
- Destruction of Important Hedgerow 21 alongside E-260/007/0 Fitches Wood, Aldringham

4.12 Transportation and Traffic

103. Access to Works plan **[APP-012]** shows five access points:-

- AC1 and AC2, both with temporary exits south of 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

This appears to contradict / be inconsistent with **[APP-074]** 6.1.26 Table 26.22, **(APP-307)** 6.2.26.2 Environmental Statement - figure 26.2 , **[APP-074]** paragraph 211 of the Environmental Statement and **[APP-587]** 8.10 Outline Access Management Plan Table 2.1 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.

104. No justification has been provided for the design of a new 4-way 40 metres wide turning geometry at crossing **[APP-587]** 8.10 Outline Access Management Plan- 'ACCESS 5 & 6 B1122 ALDEBURGH ROAD'. This would appear to be unnecessary if HGV traffic towards landfall is indeed to be directed via Sizewell Gap Road as stated by the Applicant in **[APP-587]** 8.10 Outline Access Management Plan.)

105. 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.

106. There is a lack of information on certain other of the Applicant's other intentions such as which delivery route to landfall is to be used before Sizewell Gap haul road route completed and the volumes of each category of vehicle that would use sections 3a and 3b.

107. It is unclear which routes LGVs and Workers will take to travel to and from landfall. Both categories should be required to use the existing public roads where practicable rather than a haul road so as to protect residents along the haul roads (except when needing to deliver to a particular section of the haul road itself).

108. Regarding access to Consolidation Sites, there is a statement that "Construction traffic is proposed to be routed to the CCSs, and thereafter the majority of construction traffic would be carried along temporary access roads, onshore cable route haul road and onshore cable route and substation construction access haul road."
109. From this, it would appear that the intent is to direct as much construction traffic as possible along the haul roads, rather than along public roads. That strategy will be unacceptable to residents living close to the Haul Roads and is not explained or quantified with any clarity.
110. The applicant proposes open trench cable crossing of B1122 at Aldringham. This could be highly disruptive to the route between Aldeburgh and Leiston and for local residents in the southern part of Aldringham cut off from the village centre. We request consideration of "trenchless" crossing perhaps using "trenchless" technology such as micro – tunnelling.
111. A comprehensive Transport Management Plan is required taking account of the cumulative impact of EA2 with EA1N and with the EDF Sizewell C project. The Applicant must be required to specify and implement effective control, monitoring and enforcement mechanisms to ensure that contractors comply with the access routes specified for each section of the cable route.

4.13 Human Health

112. Residents living along the cable corridor face a possible 8 to 10 years of noise and disruption to their lives. Residents such as ourselves at Riverwood who spend much of their daytime hours enjoying their gardens would be forced to shelter from noise, dust etc inside the house or flat during several years of construction. The Applicant appears to be indifferent to this very human impact on the lives of residents in this area, regarding such concerns to be "perceived" rather than "actual".
113. Restricting easy access to the network of footpaths across the cable corridors would adversely impact levels of physical activity of residents, resulting in increased use of the road network and reduced health benefits
114. The ongoing uncertainty surrounding these two projects has destroyed the previous sense of well-being and increased anxiety and mental distress of those living in communities close to the substation site(s), within the landfall area and near to the cable route.
115. The cumulative impact during construction of noise, traffic, air pollution and dust on lives and mental health at homes within say 100 metres would be highly damaging. The Applicant has sought to classify the impact of increased noise/light/water/air pollution on the resident population as being "negligible" or of "no significant magnitude" i.e. very small. Given the size of these projects, such classifications become quite meaningless, and impact upon the human well-being cannot be treated as "minimal" or "negligible".

APPENDIX

Maps [Map]

1. Aldringham River Hundred former SLA
2. B1122 Aldringham Cable Corridor Crossing Place – an aerial view
3. Aldringham Group Tree Preservation Order SCDC/87/00030
4. Works Nos. 19 and 20 - B1122 Aldringham Cable Corridor & R. Hundred Crossing
5. Footpath Map - Friston to Thorpeness
6. Environment Agency Flood Map – Aldringham River Hundred
7. Aldringham-cum-Thorpe Parish Boundary
8. Priority Habitat Deciduous Woodland – Aldringham (Magic Maps)
9. Land Registry Plan SK207310 as at 18 Nov 2019 (Riverwood)

Photos [Photo]

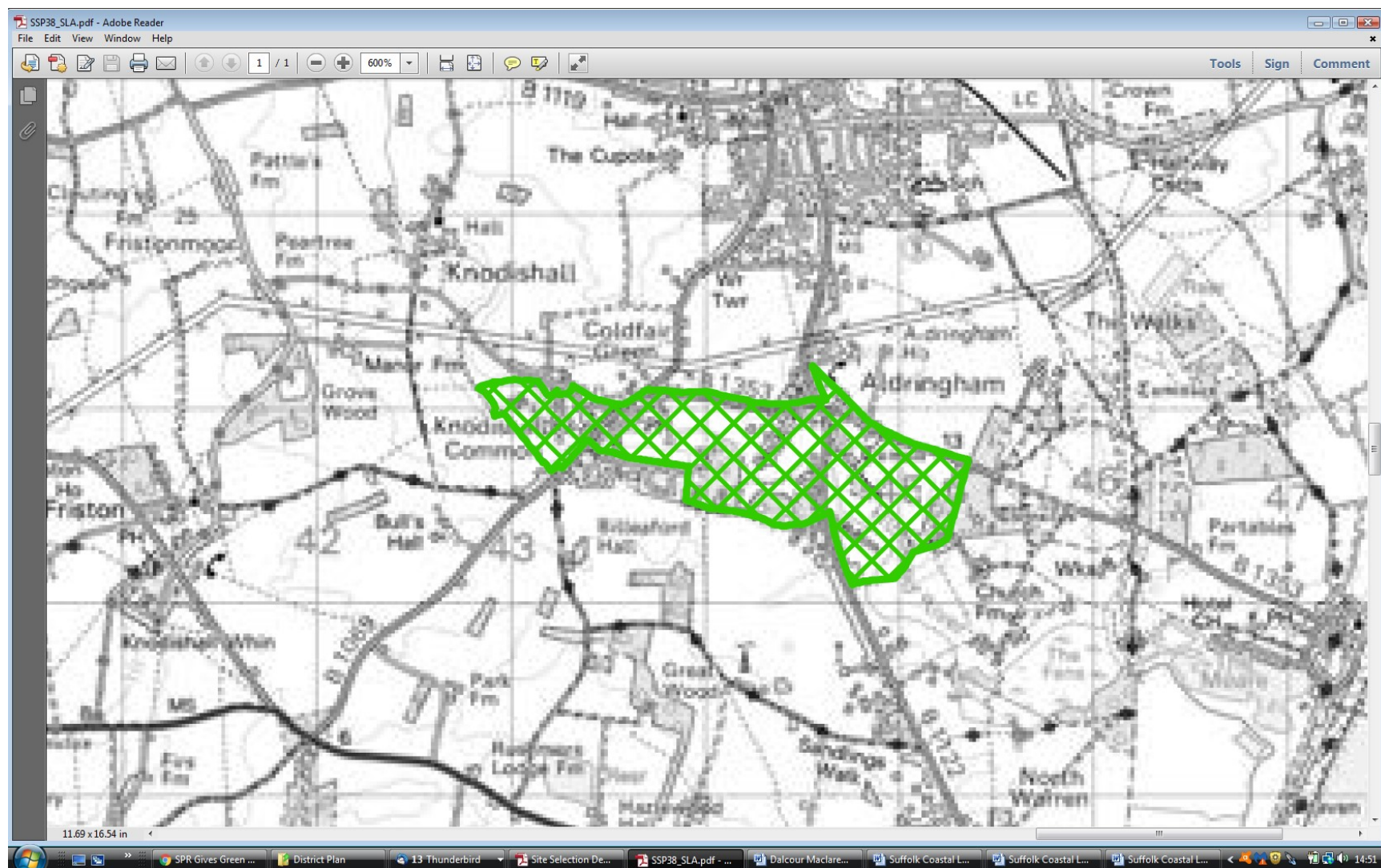
1. Aldringham River Hundred SLA viewpoints
[photos taken from Grid Reference 644774 Easting, 260438 Northing]
2. Mature Oak on meadow east of R Hundred near centre of Works No 19 cable corridor
[photos taken from Grid Reference 644784 Easting, 260497 Northing]

Figures [Fig.]

1. National Grid Ventures (NGV) Nautilus Landfall and Cable Corridor Options
(ex: Nautilus Interconnector Briefing Pack July 2019)
2. EA2 and EA1N Cable Trenching arrangement and working area

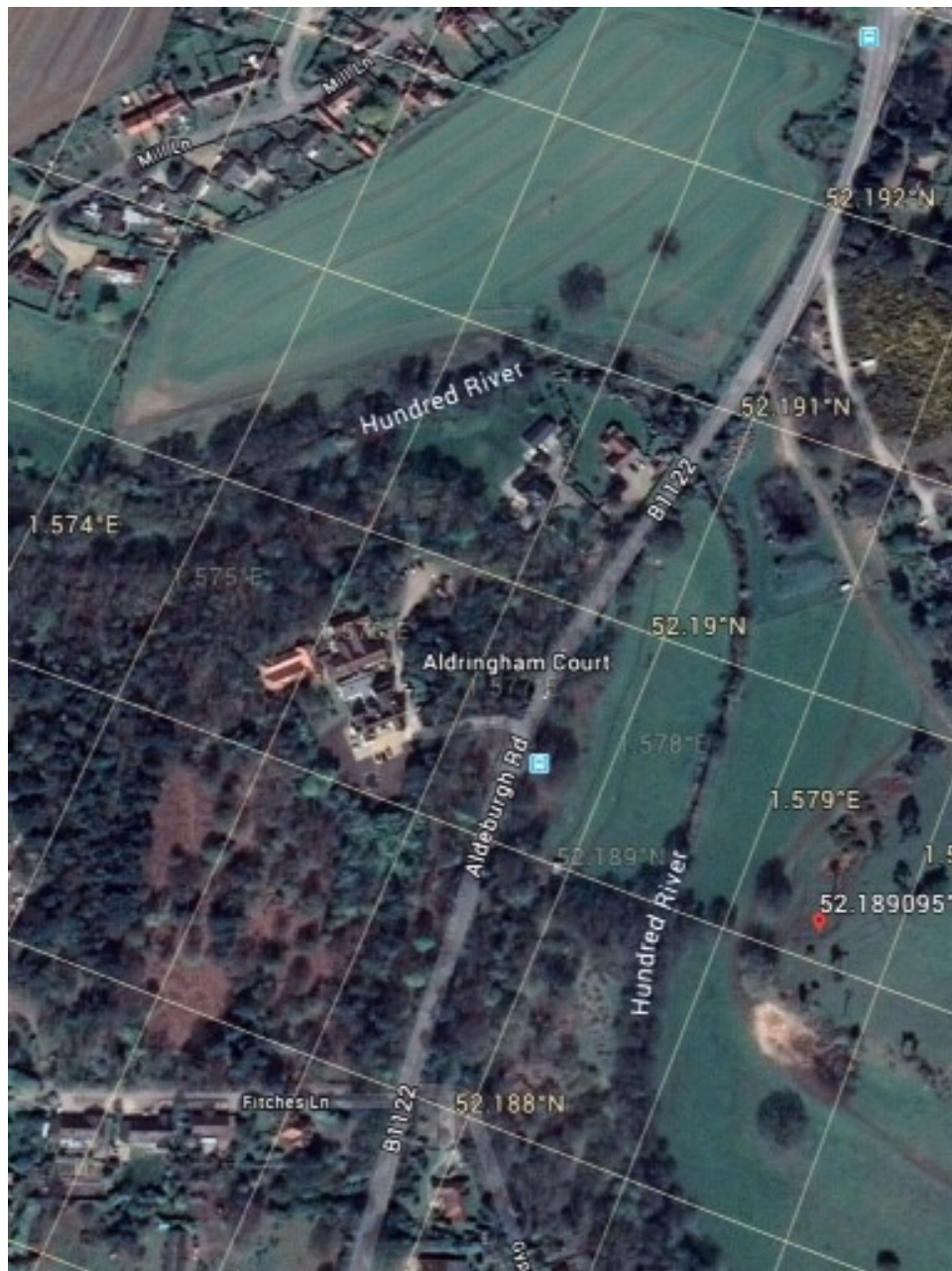
MAP 1

Aldringham River Hundred Special Landscape Area (SLA)
Suffolk Coastal District Council SSP38 (2019)



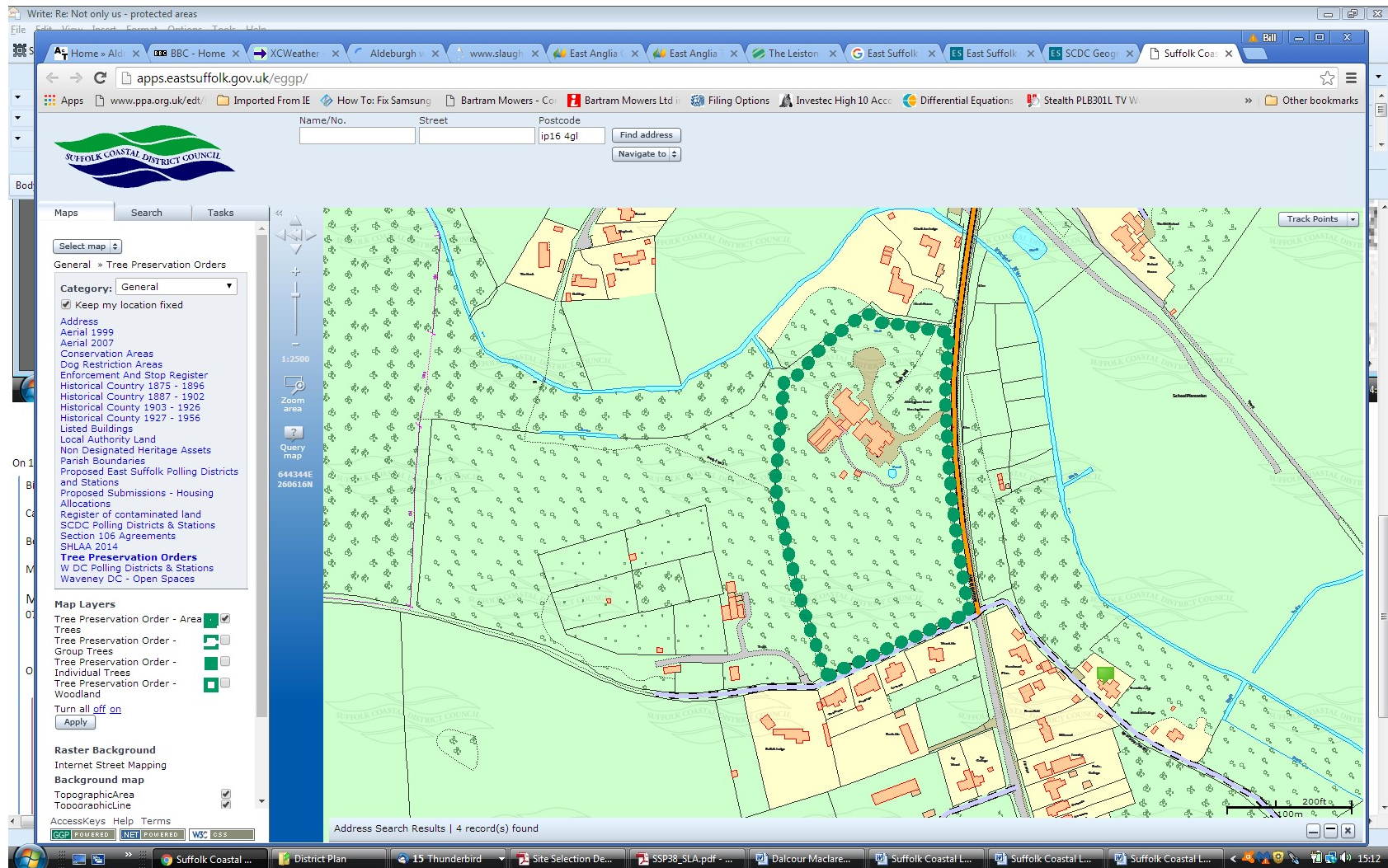
MAP 2

B1122 Aldringham Cable Corridor Crossing Place – an aerial view



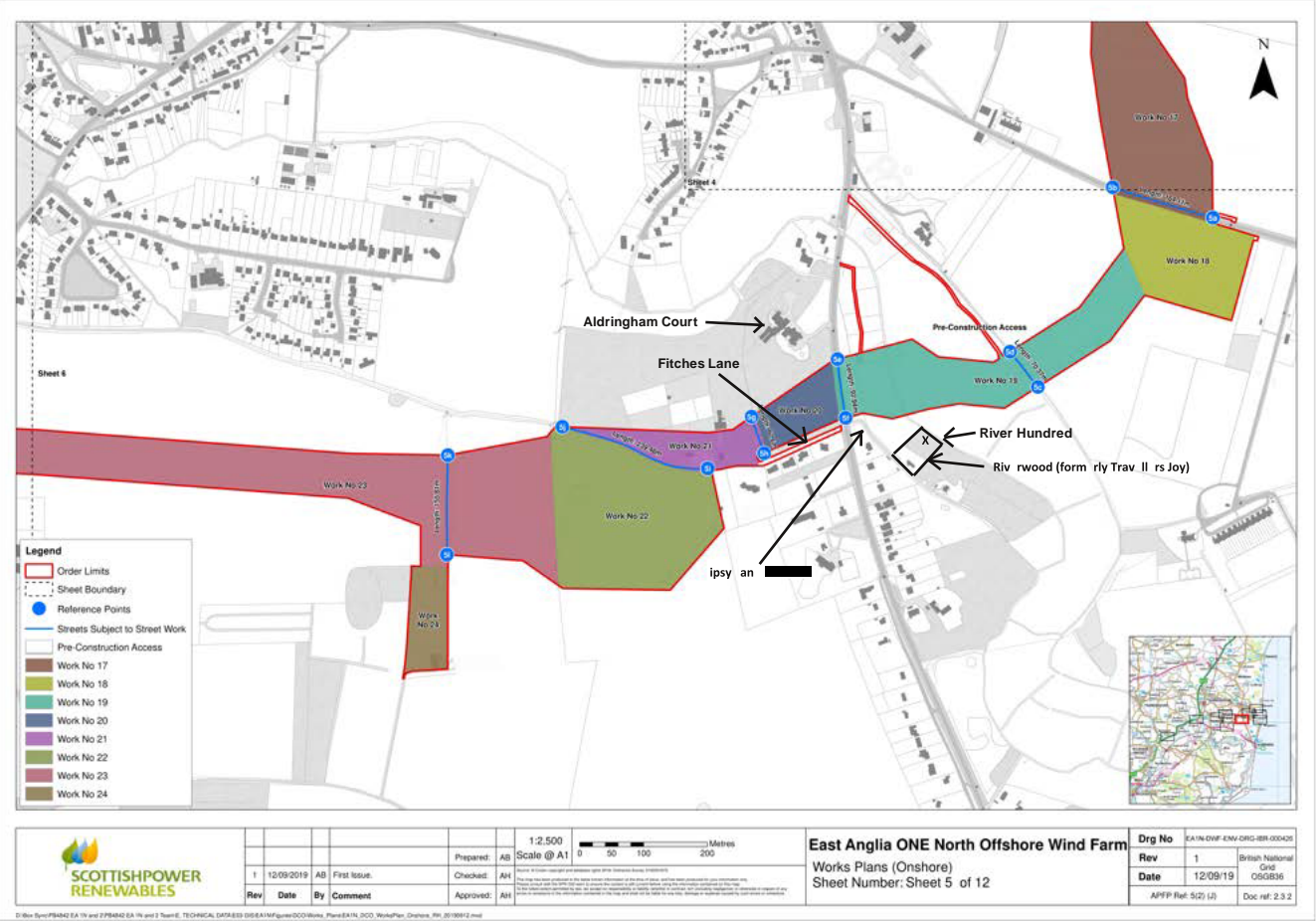
MAP 3

Aldringham Group Tree Preservation Order SCDC/87/00030

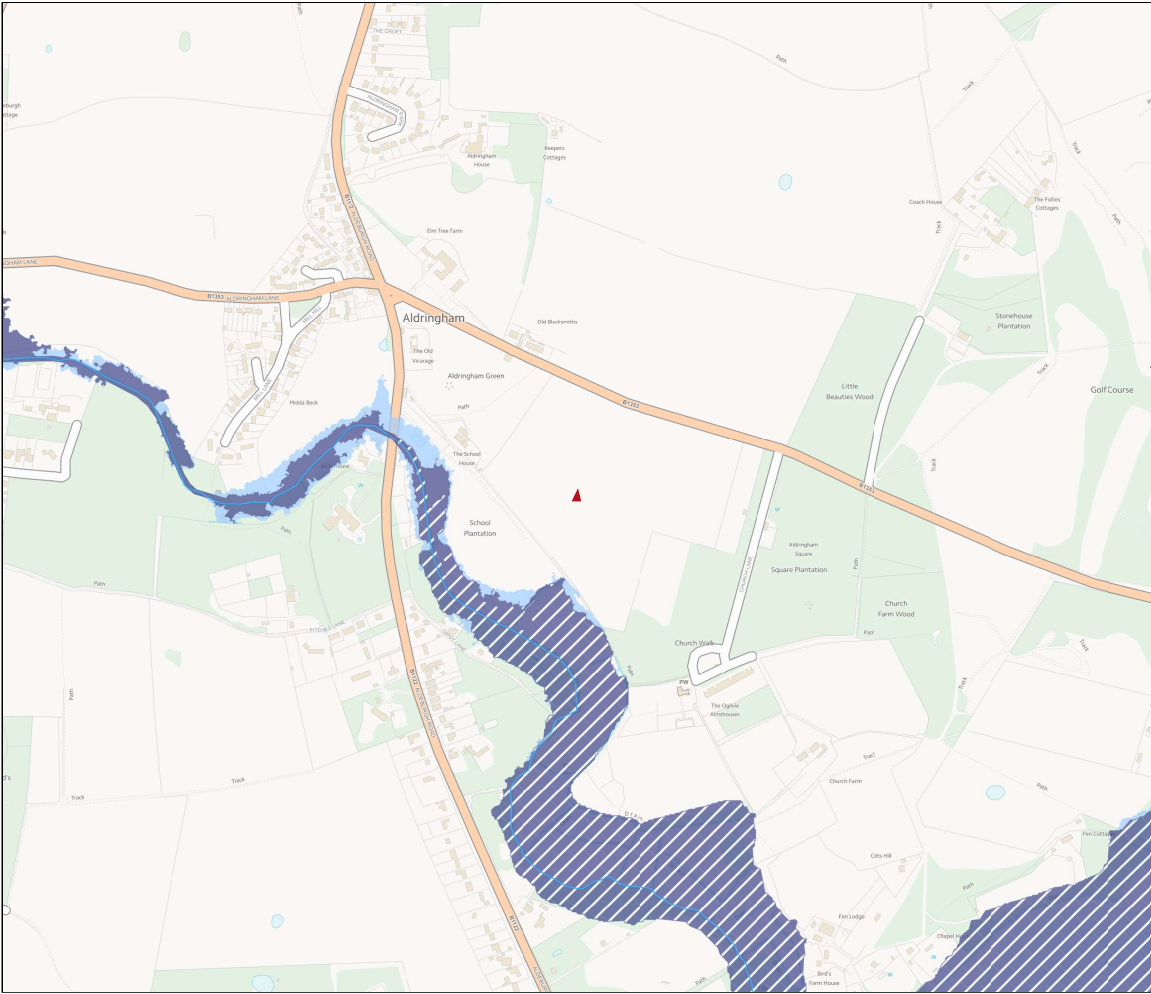


MAP 4

Works Nos. 19 and 20 - B1122 Aldringham Cable Corridor & R. Hundred Crossing
EA1N/ EA2 Works Plan Onshore Sheet 5 of 12



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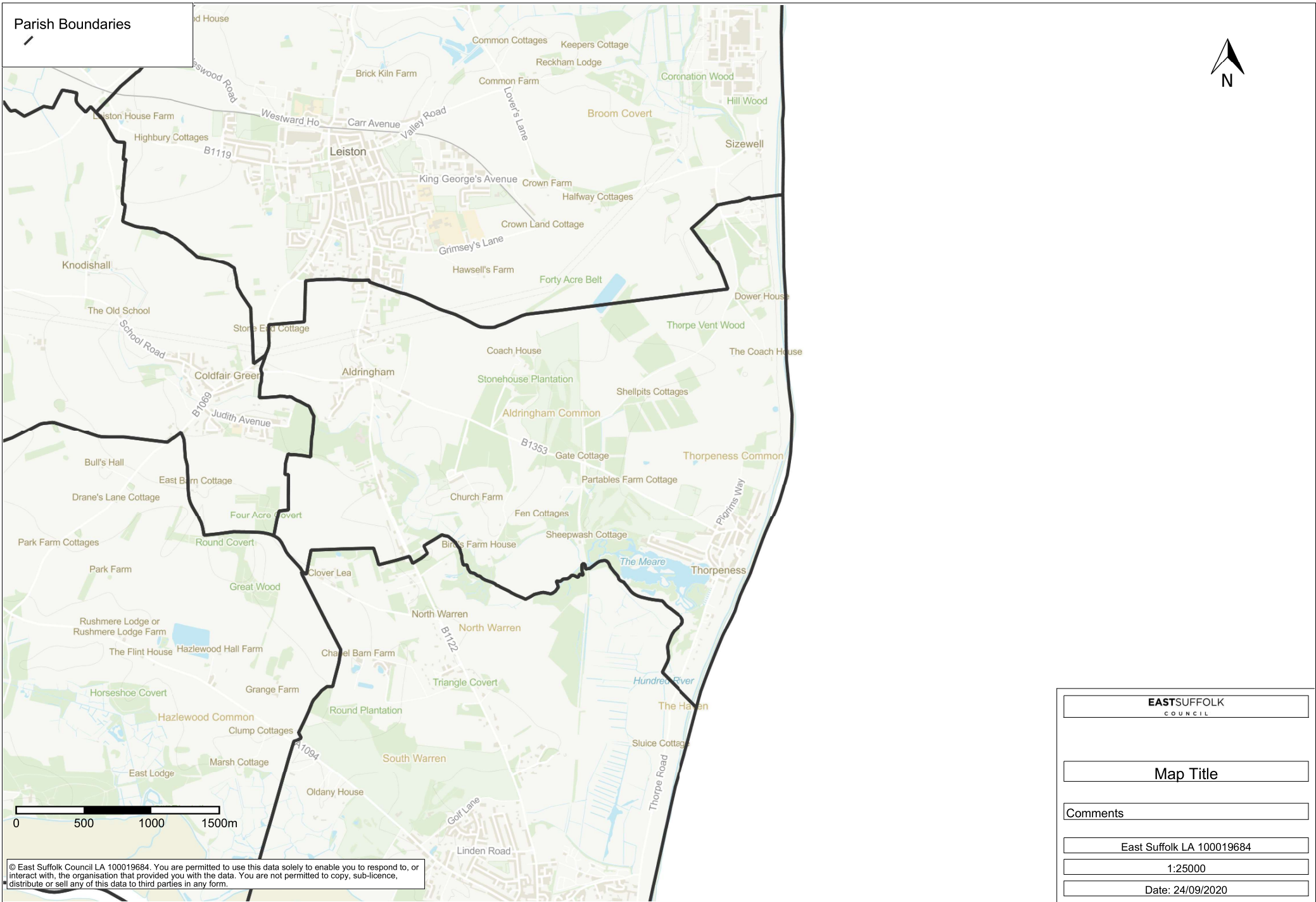
Environment
Agency

Flood map for planning

Your reference
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Location (easting/northing)
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Scale
1:10000
Created
21 Oct 2020 16:08

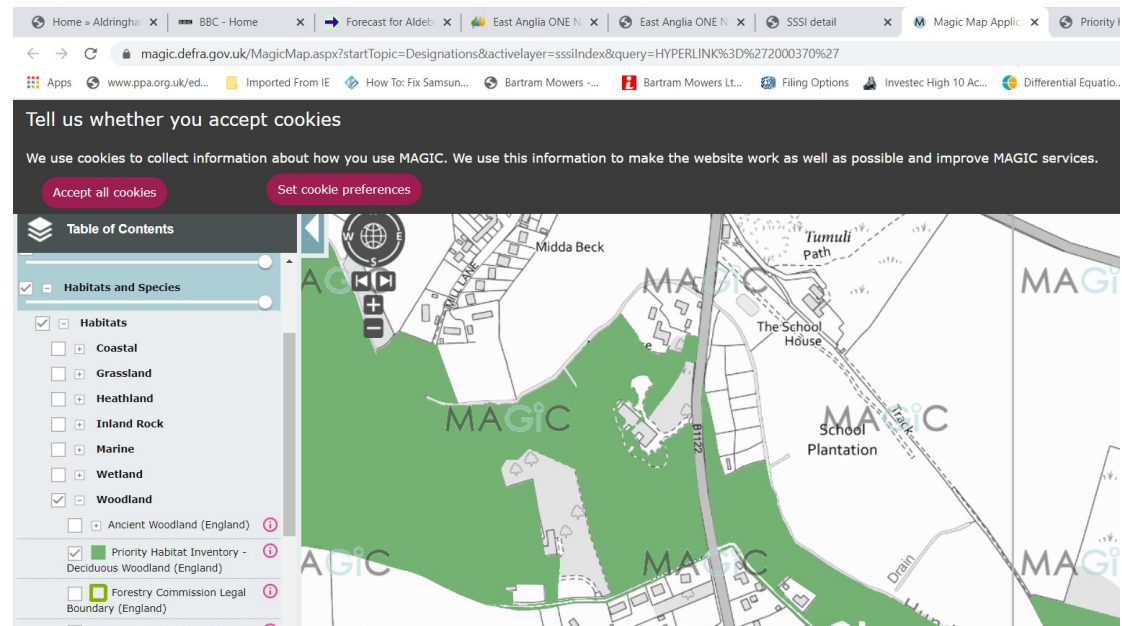
- Selected area
- Flood zone 3
- Flood zone 3: areas benefitting from flood defences
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Flood storage area

0 100 200 300m



MAP 8

Priority Habitat Deciduous Woodland – Aldringham (Magic Maps)



Priority Habitat Inventory (England)

Published by:

Natural England

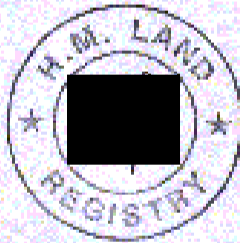
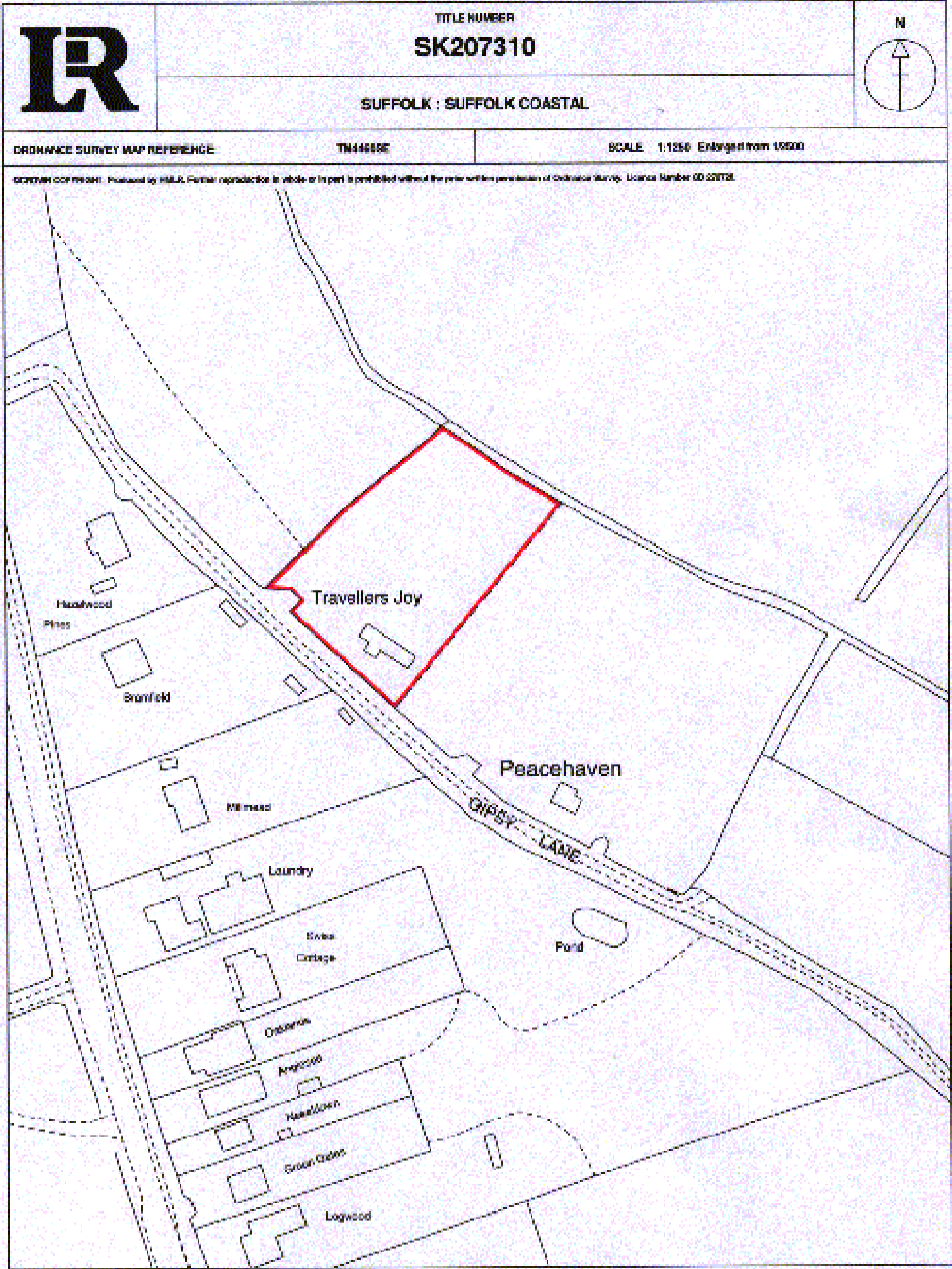
Last updated:

27 October 2020

Summary

This is a spatial dataset that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance. This inventory replaces Natural England's previous separate BAP habitat inventories: blanket bog, coastal & floodplain grazing marsh, coastal sand dunes, coastal vegetated shingle, deciduous woodland, fens, lowland calcareous grassland, lowland dry

acid grassland, lowland heathland, lowland meadows, lowland raised bog, limestone pavements, maritime cliff and slope, mudflats, purple moor grass & rush pastures, reedbeds, saline lagoons, traditional orchards, undetermined grassland, upland calcareous grassland, upland hay meadows and upland heathland. These earlier inventories were produced from 1999 onwards and derived from habitat datasets collated from across the country, prioritising areas outside of designated sites. Attribution statement: © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right [year]. The Resource Locator links are: PHI North, PHI Central and PHI South. 2 links are provided for each, Natural England Open Data Geoportal and transferbigfiles.com download. By merging all three datasets together you can create a full coverage dataset of England. These datasets do not overlap to facilitate this. Attribution statement: © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right [year].



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Photo 1

Aldringham River Hundred (former SLA) viewpoints

[photos taken from Grid Reference 644774 Easting, 260438 Northing]







Photo 2

Mature Oak on meadow east of R Hundred near centre of Works No 19 cable corridor

[photograph taken from Grid Reference 644784 Easting, 260497 Northing]



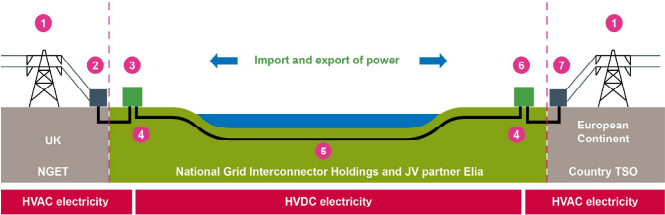
Nautilus Interconnector

National Grid Interconnector Holdings is proposing to develop Nautilus, a second Interconnector between Belgium and Great Britain, to provide a 1.4 GW HVDC electricity link between the two countries.

Electricity provided by Nautilus will be transported under the North Sea via underground subsea cables which will be buried onshore at a point known as 'landfall' before connecting into an onshore converter station and the national grid. Potential high level cable route options and various landfalls along the East Suffolk Coast are currently being assessed for Nautilus.

In order to connect Nautilus to the national grid, discussions have been ongoing with National Grid Electricity Transmission (NGET) and the System Operator. From this, NGET have provided a Connection Agreement to use a new 400 kilovolts (KV) substation provisionally referred to as "Leiston 400KV substation". This is the same substation that Scottish Power Renewables (SPR) offshore windfarms East Anglia 1N and 2 are proposed to be linked to. NGET, SPR and NGET are currently working on the premise that all projects will be connecting to the same substation – "Leiston 400KV substation".

Nautilus is currently at a very early stage of its development. Should consent be granted, a Final Investment Decision is planned for 2024. Following this, construction will commence, and the project could be operational by 2028.



- 1. Existing network
- 2. NGET onshore substation
- 3. National Grid Interconnectors onshore converter station
- 4. Underground HVAC/HVDC cables
- 5. Subsea HVDC cables
- 6. Elia onshore converter station
- 7. Belgian transmission network substation

Design

The design for the converter station has not yet been developed. A typical operational footprint for a converter station covers an area of five hectares (12 acres) with a maximum height of 24 metres. The exact size and height will depend upon the specific proposals for mitigation and construction.

The business is constantly challenging its supply chain to bring down the size of converters. The final design of the converter station will be developed through a thorough consultation process with stakeholders and the local community, as well as through collaboration with the supply chain.

Key benefits



Enough power for 1.4 million homes



1.4 gigawatts (GW) of secure, sustainable energy for British consumers



More Interconnectors help the transition to a zero carbon future

1 Welcome

Welcome to our Phase Four Consultation Public Information Day about our proposed East Anglia TWO and East Anglia ONE North offshore windfarm projects. Members of our project team are on hand today to answer your questions and we welcome any feedback you have.

As part of our pre-application consultation, ScottishPower Renewables (SPR) has published separate Preliminary Environmental Information Reports (PEIRs) for East Anglia TWO and East Anglia ONE North.

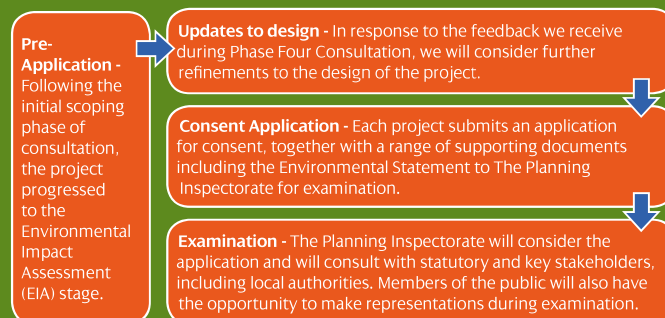
Each PEIR provides information on site selection; a detailed project description; preliminary impact assessments; potential cumulative impacts and mitigation measures to reduce or prevent environmental impacts. The content presented today and in each PEIR is shaped by the feedback we received from previous consultation rounds.

This is Phase Four of our pre-application consultation and we will use your feedback to help finalise our project proposals and impact

assessments, prior to submitting separate consent applications towards the end of 2019.

Freepost envelopes are available to return feedback on each project or you can email us at:
eastangliaonenorth@scottishpower.com
eastangliatwo@scottishpower.com

All material shared today, including each PEIR, is available to download from our website. Each PEIR (excluding appendices) is also available to view in hard copy format at the following locations: Aldeburgh Library; Aldeburgh Town Council; Woodbridge Library; Leiston Town Council; Friston Village Hall; Suffolk County Council and OrbisEnergy Centre (please check our website for times when these documents are available to view).



2 East Anglia TWO and ONE North Onshore Development

The offshore export cables will make landfall north of Thorpeness, at a location which has been selected following consultation with statutory stakeholders and technical experts.

Horizontal Directional Drilling (HDD) will be undertaken to facilitate the offshore export cables coming onshore and to avoid interaction with the cliffs, beach and intertidal area.

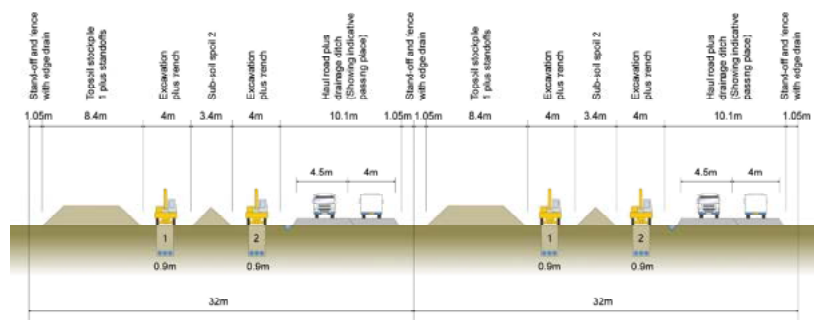
From landfall, underground cables would be installed to the substations at Grove Wood, a distance of approximately 9km.

The width of the onshore cable route would typically be 32m per project during construction, reducing to 16.1m at important hedgerows and the woodland at Aldeburgh Road.

Where trenchless techniques are used (i.e. at the landfall), the width would be wider.

An onshore substation would be required for each project, both connecting to a single National Grid substation at Grove Wood. All substations will be located adjacent to each other to maximise the use of existing screening and improve the effectiveness of new landscaping, which will reduce the visual impact of the substations.

The existing overhead lines will require modification to facilitate the grid connection, which could include up to one additional pylon and require strengthening works to the existing pylons in the immediate area. New cable sealing end compounds will also be required to connect the overhead lines to the National Grid substation.



East Anglia TWO and East Anglia ONE North Indicative cable trenching arrangement and working area