

Cabinet

Report Title:	Statutory Consultation response in respect of National Grid Electricity Transmission's proposed Norwich to Tilbury 400kV grid reinforcement Development Consent Order (DCO) application
Meeting Date:	21 May 2024
Lead Councillor(s):	Councillor Richard Rout, Deputy Leader and Cabinet Member for Finance and Environment
Local Councillor(s):	Councillors Jessica Fleming, Andy Mellen, Andrew Stringer, Keith Welham, Kay Oakes, Chris Chambers, Christopher Hudson, Georgia Hall, Robert Lindsay, Matthew Hicks
Director:	Andrew Cook, Executive Director of Growth, Highways and Infrastructure
Assistant Director or Head of Service:	James Cutting, Head of Planning / Michael Moll, Head of Programmes and GHI PMO
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Brief summary of the item to be considered

1. This report considers National Grid Electricity Transmission's (NGET) Norwich to Tilbury 400kV grid reinforcement proposals being pursued as a Development Consent Order (DCO)/Nationally Significant Infrastructure Project (NSIP) application. It recommends actions to Cabinet in terms of the response to National Grid in response to the Statutory Consultation under Section 42 of the Planning Act 2008.
2. The Statutory Consultation runs from the 10 April to 19 June 2024. As a statutory consultee the Council has an important part to play in shaping these proposals and will continue to engage throughout the process including after the Application has been formally submitted to the Planning Inspectorate in 2025, at the Examination in Public and beyond, should consent be granted by the Secretary of State for the Department for Energy Security and Net Zero (DESNZ).
3. Suffolk County Council has been working closely with Babergh & Mid Suffolk District Councils (B&MSDC) other adjoining Councils and the Dedham Vale National Landscape (DVNL) Project in responding to these proposals.

What is Cabinet being asked to decide?

<ol style="list-style-type: none"> 4. The Cabinet is recommended to: <ol style="list-style-type: none"> a) In accordance with the Council's Energy and Climate Adaptive Infrastructure Policy, recognise the importance of the Norwich to Tilbury proposals as part of the required infrastructure to connect low carbon energy generation

developments that will deliver energy security and contribute to UK government targets, but;

- b) Set out the Council's clear preference for alternative options, as published by the Electricity System Operator, in particular, for High Voltage Direct Current Undergrounding, or, if practicable and deliverable, an offshore solution, being mindful of potential impacts in East Suffolk;
- c) To formally and strongly request National Grid (NGET), (and Ofgem recognising the applicant's licence obligations) to pause the Norwich to Tilbury proposals, to enable the effective consideration of these alternatives;
- d) To lodge an objection to the scheme, as currently presented, because;
Of the need for additional undergrounding, of both the proposed 400Kv Line and of UK Power Networks Infrastructure;
The proposals do not adequately address significant issues, and that the Council expects, in the highlighted areas, clearer assessments, outcomes, and mitigations, to be included in the application that will be submitted to the Planning Inspectorate;
Of the need for much greater clarity regarding the relationship between the proposed project and proposed solar projects, including the assessment and management of cumulative effects;
- e) Set out the Council's clear preference that this project should, in coordination with other infrastructure promoters and owners, resolve local supply and connectivity issues in the Stowmarket area for, and around, the Freeport at Gateway 14;
- f) To recognise the beneficial changes that have been made to the scheme alignment, and the addition of further undergrounding, for both the proposed 400Kv line, and the existing 132 KV UK Power Networks pylons;
- g) Approve the submission of the Statutory Consultation response to NGET based on the considerations and concerns set out in this Report;
- h) Authorise the Executive Director for Growth, Highways and Infrastructure in consultation with the Deputy Leader and Cabinet Member for Finance and Environment to make any amendments to the Statutory Consultation response, and to continue working with NGET with the aim to improve on matters highlighted as of concern, and;
- i) To continue to raise the Council's concerns with Government regarding the cumulative impacts resulting from the development of this and other energy projects in Suffolk.

Reason for recommendation

5. The Council is a statutory consultee for Nationally Significant Infrastructure Projects (NSIPs). Cabinet agreed the Council's updated Energy and Climate Adaptive Infrastructure Policy at its meeting on 16 May 2023, which indicates the predisposition of the Council to supporting projects that are necessary to deliver Net-Zero Carbon for the UK. However, in order to be able to support a project, the Council expects that any impacts are appropriately dealt with. Links to the Council's Policy are provided under the Sources of Further Information section below.

6. Officers have scrutinised the proposals submitted by NGET and have spoken with local Councillors, colleagues from Mid Suffolk and Babergh District Councils, adjoining Councils and the Dedham Vale Area National Landscape Project.
7. There are a number of aspects of the proposal which are not yet satisfactorily addressed, including adequate avoidance of harmful landscape impacts in the Waveney and Gipping Valleys through undergrounding and the impact upon airfields which have not been addressed fully within the Preliminary Environmental Impact Report.
8. It is important for the Council to clearly set out its concerns to NGET at this stage, in order to influence changes and seek improvements to the proposals before NGET submit their proposals to the Secretary of State.

What are the key issues to consider?

9. Is Cabinet content that the draft Statutory Consultation response set out below appropriately sets out the overall balance between the specific issues of the proposals and the wider national benefits of the development?
10. Are the key issues identified in this report the correct ones; should others be added?
11. Is Cabinet content with the proposed delegated authorities?

How does this relate to the County Council objectives?

12. This report is linked to the County Council's objectives indicated below:

Promoting and supporting the health and wellbeing of all people in Suffolk	<input checked="" type="checkbox"/>
Strengthening our local economy	<input checked="" type="checkbox"/>
Protecting and enhancing our environment (including carbon reduction)	<input checked="" type="checkbox"/>
Providing value for money for the Suffolk taxpayer	<input checked="" type="checkbox"/>

How will this impact on the Council's objectives?

13. While it is recognised that the proposals are an important element towards achieving the UK's Net Zero objectives, a project of this scale will have significant impacts on Suffolk's communities, which can have impacts on the wellbeing for residents in the affected communities.
14. There is the potential to strengthen the local economy through the construction, operation and decommissioning that will require local resources in terms of both materials and manpower. The County will seek agreement with NGET to train the locally based workforce.
15. The proposed grid reinforcement will unlock further potential for sources of low carbon energy generation off the coast of Norfolk and also other sources within Suffolk such as solar farms. Failure to provide an enhanced energy supply network would result in these potential sources of generation not being fully utilised. It is noted that, whilst the proposals are important to realise national ambitions for carbon reductions, they have only limited direct relevance to the Council's own carbon reduction targets.

What are the resource and risk implications?

16. A Planning Performance Agreement (PPA) to cover the cost of the Council's involvement thus far and up to the end of the Examination has been agreed with NGET, hence the Council's engagement in the process is cost-neutral to the Council and is providing value for money for the Suffolk taxpayer. A further PPA will be required to cover the Discharge of Requirements if the Secretary of State grants a Development Consent Order. The Council will also seek fees for highway agreements and permits together with officer time to monitor management plans.
17. When making its decisions, Cabinet needs to be mindful that a balanced and evidenced based approach to the proposals is required. The response needs to be robust and ambitious enough to ensure achieving adequate mitigation and compensation for the development. However, to be credible and achieve effective outcomes, the demands on NGET need to be deliverable and realistic.
18. An Equalities Impact Assessment (EqIA) screening was undertaken and there were no identified impacts on people with protected characteristics.
19. It is recognised that communities impacted by and benefitting from the project and the response of the County Council to the promoter, will include people with protected characteristics and the proposed response therefore seeks to benefit all members of society.
20. In addition to the above, the Examining Authority and Secretary of State have the responsibility for discharging their equalities duties through their final decision.
21. The Cabinet is directed to consider this information provided in relation to the EqIA before making its decision.

What are the timescales associated with this decision?

22. The Statutory Consultation response must be submitted to NGET by 19 June 2024.
23. The currently anticipated timescale for the remaining DCO process (over which the County Council has no control) is as follows:
 - a) Application by NGET made to Planning Inspectorate 2025
 - b) Examination in Public 2025;
 - c) Decision by Secretary of State 2026;
 - d) Construction by NGET commences 2027, and;
 - e) Fully operational 2031
24. A further report on these project proposals will be discussed by Cabinet before the County Council submits its Relevant Representation at the start of the Examination in Public.

Alternative options

25. The Cabinet could decide to modify the response to NGET in respect of the Statutory Consultation.

Who will be affected by this decision?

26. Residents, businesses, visitors and the environment will be affected by the Secretary of State's decision regarding these proposals.

Main body of report

Overview

27. The project is one of a significant number of Nationally Significant Infrastructure Projects (NSIPs) that are proposed, or have been approved, in Suffolk. Through the work on other NSIPs, the County Council has built up a considerable level of expertise, and is recognised as a Centre of Excellence in dealing with NSIPs. A number of other NSIPs affect a similar part of Suffolk, which is further discussed in the proposed development section of this report.
28. NGET's proposal is to construct a grid reinforcement between Norwich and Tilbury. The Norwich to Tilbury upgrade has become necessary as a result of the changes to where and how electricity will be generated as part of the Government's decarbonisation and net-zero ambitions, with its aim to decarbonize the grid by 2035 and achieve Net Zero by 2050, as set out in the Climate Change Act 2008 (2050 Target Amendment) Order 2019.
29. The pattern of generation is switching towards offshore wind, nuclear, some solar, and a more interconnected grid with countries in Europe. The Government's aspirations for offshore wind have over recent years grown considerably to 50GW of offshore wind by 2030 from currently only 14 GW being operational, a large proportion of which is expected to be generated along the coastline of East Anglia. As a result, the throughput in East Anglia is required to increase from the current 4.1GW to 24.5GW in 2030.
30. National Grid consider that the existing electricity transmission grid is at full capacity and even with the other powerlines proposed (such as the SEA Link high voltage direct current undersea line between Suffolk and Kent, and the Bramford to Twinstead 400kV grid reinforcement) and upgrading of existing lines with new wires, National Grid's systems planner considers there is still a need to increase capacity between Norwich and Tilbury.

The Council's Energy Infrastructure Policy

31. At its Cabinet meeting on 16 May 2023, the Council updated its adopted Energy Infrastructure Policy, indicating its overall stance on projects required to deliver the UK's Net Zero ambitions (see Sources of Further Information section). The policy states:

"Suffolk County Council has declared a Climate Emergency and is therefore predisposed to supporting projects that are necessary to deliver Net-Zero Carbon for the UK. However, projects will not be supported unless the harms of the project alone, as well as cumulatively and in combination with other projects, are adequately recognised, assessed, appropriately mitigated, and, if necessary, compensated for."
32. In summary, the position of the Council for the Norwich to Tilbury proposals is that, whilst the development of infrastructure to enable the decarbonisation of energy supply is supported in principle, there are significant shortcomings within the submitted proposals which need to be addressed.

The Council's Engagement with Government

33. Suffolk County Council continues to engage with the UK Government, regarding the cumulative impacts of electricity generation and transmission Infrastructure, on the environment and communities of Suffolk.

34. The Council's current engagement with Government Ministers, and officials, is focussed on securing tangible early and substantive co-ordination of energy projects, and an equitable settlement for Suffolk's communities and environment, for hosting a significant proportion of the infrastructure that the UK needs, to deliver its Nationally Determined Contribution to the Paris Agreement.
35. The Council continues to engage with the Offshore Transmission Network Review (OTNR) through discussions with officials from the Department for Energy Security and Net Zero (DESNZ), and officers of National Grid Electricity System Operator (NGESO). In addition, the Council responds, often jointly with other councils, to multiple consultations regarding the future governance and management of electricity networks, and the processes and policies for energy project planning and consenting.
36. The Council is represented on the Offshore Electricity Grid Task Force (OffSET). This is a group of MPs from across the region, under the chairmanship of Sir Bernard Jenkin, that includes County Councillors from Suffolk, Essex, and Norfolk. It has been set up to ensure that the emerging proposals of the Government's Offshore Network Transmission Review (OTNR), and proposals to change the Nationally Significant Infrastructure Planning regime, are effectively scrutinised.

Proposed development

37. The proposed 184km (114miles) long Norwich to Tilbury 400kV grid reinforcement would be a new, largely overhead line (Annotated Ordnance Survey maps showing the proposed Order Limits in red are included in Appendix 1).
38. The overhead sections of the line (159km/99 miles) would consist of 50m (164 feet) high pylons with the cables strung between them. The design of the pylon towers would be the familiar lattice design.
39. The sections of the line that would run through the Dedham Vale National Landscape totalling 25km (16 miles) are proposed to be under-grounded. Where the lines transition from overhead to underground, Cable Sealing End (CSE) Compounds with Full Tension Gantries are required.
40. An alternative proposal is also included within the consultation. This is to substitute the underground cables for overhead lines in the Waveney valley near Diss, which would add another 2km (1 mile) of cable. The overhead lines would reduce to approximately 157 km (98 miles). Two additional CSE Compounds would be required.
41. The underground cables would mostly be buried by means of an "opencut" method; this requires an approximately 80m wide swathe of land to be disturbed. Cable ducts would be placed in the trench and reburied to a depth of no less than 1.2m. A haul route would be laid along the length of the undergrounded sections using aggregate which would be removed after construction. Restoration of the land would follow although no trees would be planted along the cable route itself.
42. To lay cable ducts under the Rivers, Horizontal Directional Drilling (HDD) techniques would be utilised. During construction there would be some disruption to navigation on the Stour.
43. Compounds for the storage of equipment and materials would also be required at strategic locations along the route, for example close to Brook Farm Airfield in the Parish of Burgate.
44. The pylons themselves would arrive on site on Heavy Goods Vehicles (HGV) as a flat pack. In most cases they would be assembled on site and hoisted into position

by a crane. Some supporting office provision will be sited remotely in Bury St Edmunds.

45. The proposals also result in the need for some Special Order Abnormal Indivisible Loads which would be required to access Bramford sub station and smaller abnormal loads such as large cranes, piling rigs and deliveries of cable drums will travel to access points along the construction corridor.
46. In common with other DCO applications, the application parameters use what is known as the “Rochdale Envelope”, whereby the proposals are based on a reasonable worst-case scenario in terms of their size and impacts. The applicants are proposing to locate mitigation planting within the site (red line) boundary, in particular in the vicinity of the Cable Sealing End Compounds.
47. Within the redline boundaries indicative pylon tower locations are included but are likely to be adjusted post-consent as part of a micro-siting process, which would be within set limits of deviation.
48. The Dedham Vale National Landscape underground cable section lays between the Raydon and Lawford sealing end compounds. The potential Waveney Valley underground cable section lays between the Roydon and Wortham sealing end compounds. Also indicated are the Bramford substation and the Lawford Substation. Within the red line are included construction access routes.
49. In terms of cumulative impacts these include the 400kV grid reinforcement proposals by NGET between Bramford and Twinstead, which would also connect at Bramford substation. A decision on this project (also a NSIP) by the Secretary of State is awaited and that decision is currently scheduled to be made by 12 September 2024. The substation is already a focus for a number of energy related projects which are being determined under the Town & Country Planning Act by Babergh & Mid Suffolk District Councils. Along the route there are also emerging proposals for additional solar farms and associated battery energy storage.
50. Further afield there are also cumulative impacts with other NSIP proposals including Sizewell C Nuclear Power Station for example with potential skills shortages.

Summary of the Key Points of the Council’s proposed Statutory Consultation Response

Undergrounding and other alternatives routes

51. NGET proposes to underground the cables in the sections under the Dedham Vale National Landscape and identifies undergrounding as an option in the Waveney Valley. Cabinet is recommended to welcome this in the Council’s response, as a way of reducing the visual and landscape impact of the Norwich to Tilbury proposed development.
52. Whilst the proposed areas of undergrounding are supported, the Council is conscious of the concerns from local communities of the visual impact of the remaining sections of overhead lines. Officers are currently considering the proposed route in detail and will be proposing additional undergrounding where national policy would support it. This will include areas close to or within the Waveney, Gipping and Stour Valleys
53. The Council has considers that other alternatives such as offshoring or undergrounding the entire length of the route between Norwich and Tilbury should be given further consideration particularly as the Council believes that the Norwich to Tilbury proposals are not required until the middle of the 2030s.

Policy

54. Although there is recognition that grid reinforcement is necessary for the delivery of net zero but not at any environmental cost; the Council recognises that, whilst the development of infrastructure to enable the decarbonisation of energy supply is supported in principle, there are still significant shortcomings within the submitted proposals which need to be addressed.
55. The following sections set out in more detail the key issues proposed to be raised in the Council's Statutory Consultation response.

Need case and alternatives

56. While the Council recognises the principal need of grid reinforcement, it considers that it is premature for NGET to submit its DCO application until alternatives have been considered in full, and would need to object to any application where this work has not been undertaken.

Key issues

SCC Objections to current proposals

57. SCC recognises the potential importance of the Norwich to Tilbury (NT) proposals as part of the national infrastructure to connect energy developments that will reduce carbon emissions, to decarbonise the grid, improve energy supply resilience, and help to meet the challenges of climate change. For reasons given below however, SCC has no option but to object to this proposal as it stands.

The Need Case Presented by National Grid

58. With the Government's target of having up to 50GW of installed wind power in place by 2030, NGET's strategy is to establish a series of connections along the east coast of the UK, all the way from Scotland to the south of England. NGET has previously stated:
59. "East Anglia's 400,000-volt (400 kV) electricity transmission network was built in the 1960s to supply regional demand, centred around Norwich and Ipswich. With the growth in new energy generation from offshore wind, nuclear power and interconnection with other countries, there will be more electricity connected in East Anglia than the network can currently accommodate. The existing network in East Anglia currently carries around 4,500 MW of electricity generation. By 2031 we expect between 14,000 MW and 18,500 MW of new generation and interconnection to connect in the region.
60. Our existing power lines do not have sufficient capacity to accommodate this new generation. We are already carrying out work to upgrade the existing transmission network in East Anglia, however even with these upgrades the network will not be sufficient. Norwich to Tilbury is a key part of our wider investment programme to upgrade our electricity transmission network in East Anglia to ensure we meet this future energy transmission demand. In the next few years, new connections are expected to feed into substations at Necton, Norwich Main, Bramford, Friston and Sizewell.

61. In addition, two offshore wind farm projects and one interconnector have agreements in place to connect into the new EACN [East Anglia Connection Node] substation [in Tendring, Essex]. The two offshore wind farms – Five Estuaries and North Falls - and Tarchon Interconnector are currently in development. If they are consented, they are expected to be operational by the end of the decade.”

Alternatives

62. The County Council’s believes credible alternatives such as an offshore centred approach or High Voltage Direct Current undergrounding, delivered at pace, to minimise onshore infrastructure in Suffolk should be explored fully. If this approach can deliver an alternative to Norwich to Tilbury in a timely manner, without risking wider Net Zero, renewable generation, and decarbonisation targets, it would be welcomed by the Council and the communities it represents.
63. On behalf of all of the local authorities along the Norwich to Tilbury route, Essex County Council commissioned consultant Andy Hiorns to produce a Report into the need for the Norwich to Tilbury proposals. The report concluded that the proposals were premature and would not be needed until the mid-2030’s. This is disputed by NGET. However, the Report also concluded that alternative offshore alternatives would be much more expensive (see Sources of Further Information section).
64. The National Grid Electricity Systems Operator (NGESO) have also published a report into the various alternatives to grid reinforcement in their East Anglia Study. This included ten different network options including a primarily offshore option. It also concluded that alternative offshore alternatives or a HVDC Norwich to Tilbury underground link would be more expensive and procurement of the cables would delay implementation (see Sources of Further Information section). NGET concurs with these conclusions.
65. Considering the above it is proposed that the County Council should call for a pause of the proposals to enable the full assessment of the potential alternative coordinated offshore solutions or alternatively onshore high voltage direct current undergrounding to be made.

Undergrounding in the Waveney Valley

66. The proposals involve overhead lines crossing close to the west of Diss in attempt to avoid other constraints. This raises significant concerns and should be avoided unless there is a clear case that undergrounding is not achievable.
67. The Council considers there to be a robust case for undergrounding where the line crosses the Waveney valley, as this is supported by National Planning policy, noting that the routing and method of this will need to avoid harm to Wortham Ling SSSI. This belief is also supported by the Waveney Valley Valued Landscape Report (see Sources of Further Information section).
68. The alternative underground routing put forward as part of this consultation goes some way in lessening the impacts of the proposals. However, the proposed undergrounding needs to be extended further into Norfolk and Suffolk in order not to undermine the benefit of undergrounding as the lines would still be clearly visible. By extending undergrounding further north to proposed Lattice Tower RG080, to the north of Snow Street, impacts upon the Waveney Valley would be reduced significantly. By extending undergrounding further south to proposed Lattice Tower RG098, to the east of Brook Farm Airfield, the potential for conflict with aircraft and

the Waveney Valley would also be reduced significantly (see tower locations circled in red in Appendix 1, Inset Map A Diss).

Overhead lines close to Gislingham

69. It is noted that the proposed alignment of the overhead lines takes them close to the village of Gislingham. Officers are exploring whether the alignment could be modified to reduce any impacts upon the village (see Appendix 1, Inset Map B Mendlesham).

Undergrounding in the Gipping Valley

70. Where the proposed lines cross the rural environment of the Gipping Valley, the Council seeks realignment/undergrounding to mitigate lasting detrimental impacts upon Creting Hall which is a listed building. The Council also seeks undergrounding sections of the existing 132kV network connecting to Stowmarket Substation which would result in the avoidance of substantial harm to the assemblage of listed buildings around St Mary's Church, Badley (see approximate locations of listed buildings in Appendix 1, Inset Map C Stowmarket).

Undergrounding in the Dedham Vale National Landscape

71. The Council welcomes the proposals to underground the section which runs through the Dedham Vale National Landscape and the siting of the Cable End Sealing compounds so that they avoid significant harm to the Dedham Vale National Landscape and Raydon Airfield. Although in terms of a conflict with Raydon Airfield moving the Cable End Sealing Compounds further north to Lattice Tower JC026 in the vicinity of Wenham Thicks would be beneficial. (see Appendix 1, Inset Map E Dedham).

Undergrounding to the North of Lawford Substation

72. Although within Essex, the Council fully supports the undergrounding of the lines as they leave Suffolk and the Dedham Vale National Landscape and approach the Lawford substation because of the potential impact upon the National Landscape and the local residents close to the proposed substations who would potentially be boxed in by lines travelling both to and from Lawford substation (see Appendix 1, Inset Map F Ardleigh).

Undergrounding to the South of Lawford Substation and the Dedham Vale National Landscape

73. Although within Essex, the Council fully supports the undergrounding of the lines as they leave Lawford substation because of the potential impact otherwise on the Dedham Vale National Landscape and the residents close to the proposed Lawford substation. Additional undergrounding in this area would also remove the potential to stop flying activities at the historic Boxted airfield however (see Appendix 1, Inset Map G Boxted).

Bramford Substation

74. The substation provides a means of connection for multiple energy projects including from within the local area and from much further afield. The Norwich to Tilbury proposals must seek to minimise the impact upon the local residents and the environment as a whole. Proposals must take in to account the cumulative impacts from the other projects both in respect of construction and operation.
75. The Council considers that a full design review in the Bramford area is now essential, involving both this project and the Bramford to Twinstead Reinforcement (BTNO) as well as the UKPN 132kV network in this area. This is necessary to identify further

options for mitigation and infrastructure reduction, to minimise adverse impacts on the host communities. The Council recognises, and expects, that this will require effective collaboration between NGET, UKPN, and Ofgem (see Appendix 1, Inset Map D Bramford).

Electricity Distribution System

76. The Council considers that there are opportunities for the NT project to facilitate the removal of 132kV pylon lines operated by UK Power Networks, to rationalise and improve the network resilience overall, whilst reducing the cumulative visual impact of energy infrastructure, and compensating for the additional visual impact of the new NT 400kV power lines. Such an approach appears to be consistent with the British Energy Security Strategy. It appears there may be opportunities for rationalisation of this 132kV network, around Needham Market, and between Diss and Stowmarket (see for example the existing 132kV line between Bramford and Lawford substations, highlighted in the UKPN Network Infrastructure and Usage Map in the Sources of Further Information Section). The Council recognises, and expects, that this will require effective collaboration between NGET, UKPN and Ofgem.
77. Therefore, a Distribution System Options Report, should be produced for this project, to ensure that all the potential environmental and electricity system and economic benefits of this project are fully realised as per the example shown in the Sources of Further Information Section. This should aim to resolve local supply and connectivity issues in the Stowmarket area for, and around, the Freeport at Gateway 14.

Cable Sealing End Compounds

78. The Council welcomes the work done to reduce the potential landscape impacts although further detailed mitigation proposals will be required for example in respect of the establishment and management of planting designed for landscape mitigation.

Climate Change

79. In accordance with the Council's Energy and Climate Adaptive Infrastructure Policy (2023), the landscaping and planting across the project should be designed, planted and maintained in such a way that it is responsive to local conditions and adaptable to the impacts of climate change.

Traffic and Transport (including Public Rights of Way)

80. The Council is concerned to ensure these impacts are fully assessed and mitigated, especially as regards construction traffic impacts on SCC's rural road network and the limited options for suitable HGV and AIL routes once the route alignment has been chosen. Removal of temporary haul roads and decommissioning also needs careful consideration.
81. Construction traffic; planning must consider the potential for significant adverse environmental impacts, including cumulative impacts, the Traffic and Transport proposals should include a statement around requiring more extensive monitoring, controls and enforcement for construction traffic, as it is almost absent from the documents, as well as further information on the assessment method. The transport impacts of the pre-commencement operations including the creation of temporary site accesses and construction compounds are also not referred to. Accesses and haul routes should minimise impacts on ecological and landscape features and minimise impacts on the efficient and effective operation of agricultural land and businesses.

82. Public Rights of Way; (PRoW) given the significance of PRoW for access to the countryside, for wellbeing and within national planning policy, the Council is disappointed that Public Rights of Way are not treated as a separate topic, as requested during consultation, but split up over a number of disciplines that makes it difficult to see the full picture. Effective mitigation is needed for the impacts on recreational users of the PROW network, especially during the construction period.

The Avoidance of Airfields

83. The proposals as currently continue to have potentially serious implications for a number of airfields including the following:
- Priory Farm
 - Brook Farm, Burgate
 - Wattisham
 - Elmsett
 - Raydon
 - Boxted
84. In the interests of the amenity of users of these facilities, national defence and the general aviation industry in the area, the proposals should allow for their continued and safe use and if necessary proposals be amended further (see Appendix 1 Inset Maps A Diss, D Bramford, E Dedham and F Ardleigh).

Economic Development and Skills

85. The Council consider that there are significant positive opportunities that the project alone will bring to the county and the wider region, and where there is synergy alongside further transmission, distribution and generation projects. We expect National Grid to coordinate their projects in Suffolk and actively engage with the Council via a Memorandum of Understanding, with regard to Norwich to Tilbury, Sealink and Bramford to Twinstead, to secure benefits for and investment in local businesses and employment networks. Critical national infrastructure must not only deliver the Government's energy objectives but also deliver sustainable societal and economic impacts in the regions that are hosting them and as set out in Suffolk County Council's Energy and Climate Adaptive Infrastructure Policy. National Grid as a responsible corporate entity should actively engage with the Council and its partners to identify and deliver inclusive growth, social value and additional wider benefits.
86. In terms of skills the Council is seeking for NGET to foster the local skills base in energy related industries within an area which is destined to host numerous energy related infrastructure projects. Therefore, financial measures in respect of relevant skills training within the local area should be agreed. There must also be adequate assessment of the likely origins of the labour force (both local and non-local), especially in the context of other energy projects with potentially overlapping construction periods, include East Suffolk for example.

Tourism Mitigation

87. The Council anticipates that the proposed development, given its location which is located across the Dedham Vale National Landscape and other rural areas of Suffolk fully consider tourism impact. It could have significant impacts upon visitor accommodation (in the construction phase), visitor perception, and ultimately visitor

numbers, both during construction and during operation, hence financial support to offset the detrimental impact of construction upon, in particular, tourism in the Dedham Vale National Landscape and other areas should be agreed.

Community Benefits

88. Secondary mitigation would be in addition to any potential community benefits from the development, including any emerging requirements in the anticipated community benefit guidance as outlined in the recent consultation focussed on community benefits for Electricity Transmission Network Infrastructure. We would encourage the project promoter to also consider such community benefit options, as well as explore opportunities to coordinate community benefits with other National Grid projects in the region to exploit synergies. The Council would be happy to discuss further options suitable for the locality. The Council also seeks project promoters to consider legacy opportunities of all elements of their development.

Other Issues

Cumulative Impacts

89. This is an important issue given the numbers of infrastructure and other developments proposed across Suffolk, and the need for a full assessment of environmental and socio-economic impacts of the cumulative effects of the Norwich to Tilbury in conjunction with those other projects. For example, Appendix 1, Inset Maps D Bramford and E Dedham, show sections of the proposed Order Limits of the Bramford to Twinstead 400kV Grid Reinforcement. Appendix 1, Inset Map B Mendlesham, shows the proposed Order Limits of the White Elm 200MW Solar Farm and Battery Energy Storage System.

Mitigation Measures

90. The Council considers that, notwithstanding embedded mitigation and potential modifications to the scheme as proposed above, it will be unavoidable for the development to result in residual impacts on the community and locality, including on amenity, loss/reduced quality of recreational opportunity for the community, culture and heritage, and health and wellbeing. The Council expects appropriate and robust mitigation and/or compensatory offsetting for such residual impacts, which could be, for example, include funding for alternative outdoor recreational offers, access and amenity improvements, cultural and heritage enhancements.

Post Consent Controls

91. The Council requires that during and after construction, for activities to be controlled by robust management plans draw up in accordance with outline plans approved by the Secretary of State and drawn in consultation with the main contractor and approved under a requirement of the Development Consent Order.

The Avoidance of Heritage Assets

92. The Council supports the refined routing to reduce impacts upon Mellis Conservation Area and Thornham Park, however the area is rich in heritage assets and further mitigation will be required.

Biodiversity

93. Biodiversity Net Gain; whilst the principle of Net Gain within the Order Limits is strongly supported, the Council considers more detailed information will be required within the relevant management plans so that Biodiversity Net Gain will be delivered.

Historic Environment

94. Impacts upon the setting of listed buildings in the vicinity of the route requires careful consideration particularly alignment and of assessment of landscape impacts. Difficulties in locating specific assets within the survey information supplied needs to be addressed.

Archaeological mitigation requirements

95. The Council would want to see further proposals to secure the archaeological work appropriately. The County understands there is a degree of flexibility in the scope of the project, particularly within the over-head sections. However, there needs to be an understanding of the heritage assets as a starting point for determining mitigation/flexibility in the scheme. For archaeology this will require an appropriate level of archaeological evaluation, both non-intrusive and intrusive evaluation, to assess the appropriate mitigation/flexibility.

Retention of Construction Bridges and tracks

96. Proposals for the retention of bridges and tracks required for construction to improve public access to the area should be included, which could provide a legacy benefit for the local community. If the NGET proposals include the use of a construction bridge over the River Gipping, this might for example offer potential legacy benefits as access for public rights of way are constrained in this area.

Water Environment Impacts of construction

97. The Council seeks reassurance that adequate catchment is made available for surface water run-off during construction.

Geology and Hydrology

98. Minerals resources safeguarding; the Council acknowledges that there are no detrimental impacts upon existing minerals and waste facilities. In terms of the potential impact upon the underlying sand and gravel resources, the national significance of the proposals outweighs the potential sterilisation of what would be at most regionally important sand and gravel resources.

Agriculture and Soils

99. Best and Most Versatile Agricultural (BMV) Land; the Council acknowledges the limited negative upon BMV land so long as appropriate soil handling techniques are guaranteed.

Air Quality

100. Fugitive dust emissions; the Council supports proposals to use best practice measures to avoid fugitive dust emissions so long as the appropriate methodology can be guaranteed.

Noise and Vibration

101. Proposed working hours; the Council will object to proposals to allow any construction on Saturday afternoons, Sundays and Bank Holidays and outside of core construction times.

Public Health

102. Electric and Magnetic Forces: the Council have been reassured that all recognised standards in respect of Electric and Magnetic Forces will be adhered to.

Conclusion

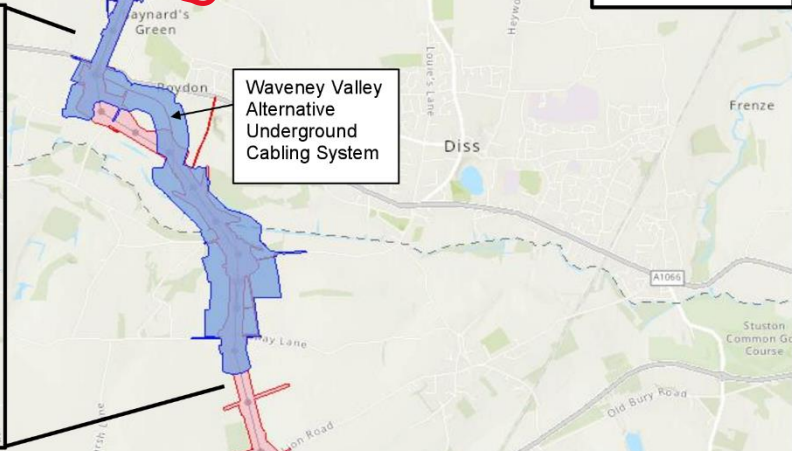
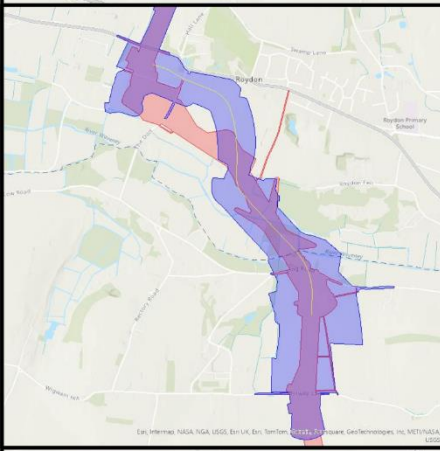
103. It is recommended that officers, through the delegation agreed as part of this paper, continue to make representations in order to try and achieve the best possible outcomes.

Sources of further information

- a) National Grid Norwich to Tilbury web pages
<https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/norwich-to-tilbury>
- b) Cabinet paper “Council’s Policy and Process for Energy Generation and Connection Projects” from 23 February 2021 – available at [Meeting Documents - Committee Minutes \(suffolk.gov.uk\)](#)
- c) Cabinet paper “Revision of Suffolk County Council’s Energy Infrastructure Policy” from 16 May 2023 – available at [https://committeeminutes.suffolk.gov.uk/DocSetPage.aspx?MeetingTitle=\(16-05-2023\),%20The%20Cabinet](https://committeeminutes.suffolk.gov.uk/DocSetPage.aspx?MeetingTitle=(16-05-2023),%20The%20Cabinet)
- d) Hiorns Report <https://www.suffolk.gov.uk/asset-library/n2t-the-hiorns-report.pdf>
- e) Joint Councils non-technical summary of the Hiorns Report
<https://www.suffolk.gov.uk/asset-library/n2t-joint-councils-non-technical-summary-of-the-hiorns-report.pdf>
- f) National Grid Electricity Systems Operator East Anglia Study
<https://www.nationalgrideso.com/future-energy/projects/offshore-coordination-project/east-anglia-study>
- g) Waveney Valley Valued Landscape Report
<http://suffolklandscape.org.uk/wp-content/uploads/2024/04/Waveney-Valley-Valued-Landscape-Final-Report-17-April-2024.pdf>
- h) British Energy Security Strategy
<https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy#networks-storage-and-flexibility>
- i) UKPN Network Infrastructure and Usage Map
[Network Infrastructure and Usage Map \(NIUM\) — UK Power Networks \(opendatasoft.com\)](#)
- j) Distribution System Options Report
<https://www.nationalgrid.com/electricity-transmission/document/137461/download>

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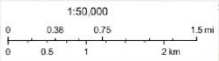


Brook Farm
Airfield, Burgate

Waveney Valley
Alternative
Underground
Cabling System

Key

-  Proposed Site Boundary
-  Waveney Valley Alternative
-  Airfields



Esri, Intermap, NASA, NGA, USGS, Esri UK, Esri, TomTom, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, BrackenhartSGS



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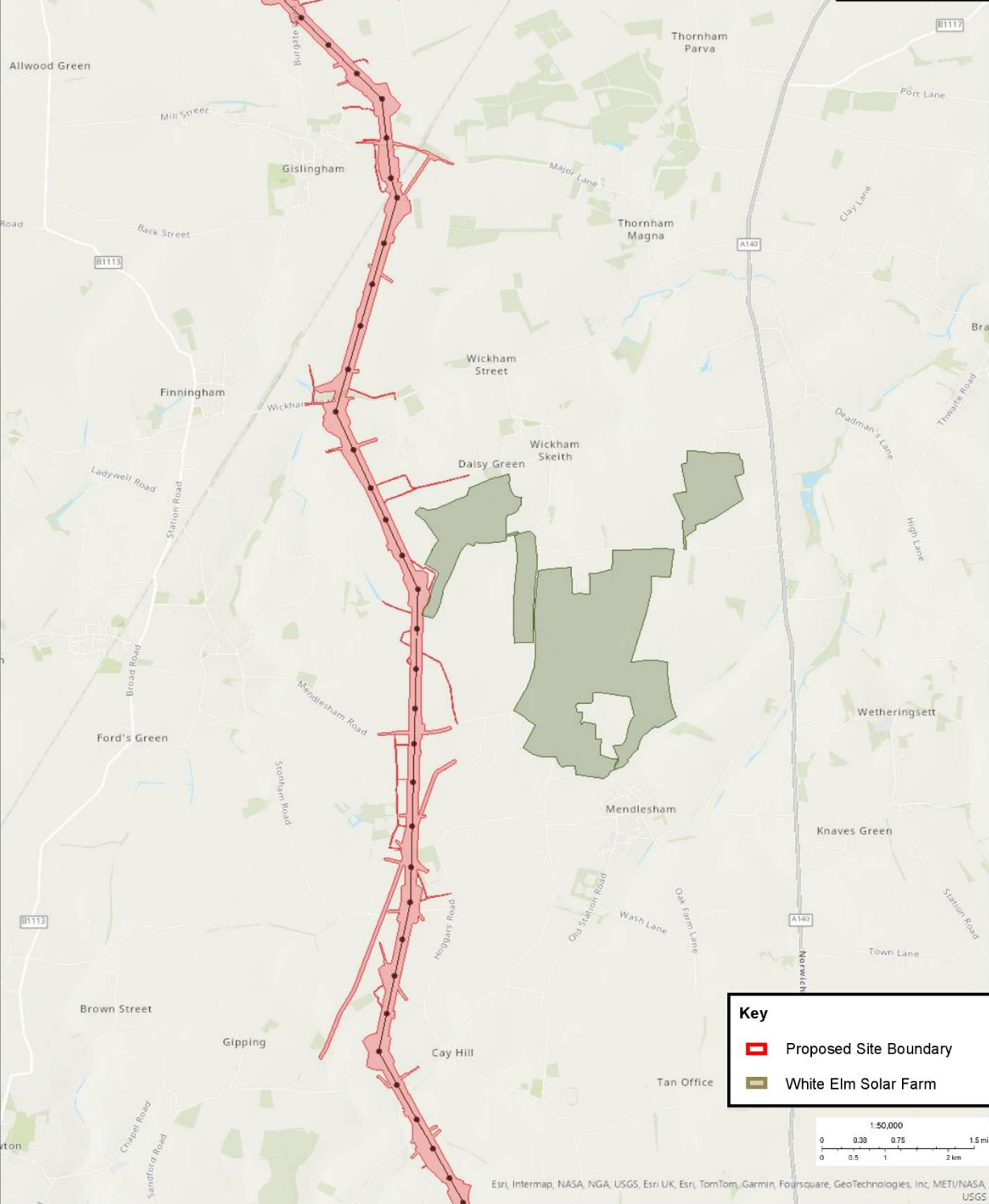
NORWICH TO TILBURY
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Electricity Transmission's proposed Norwich to
Tilbury 400kV grid reinforcement Development
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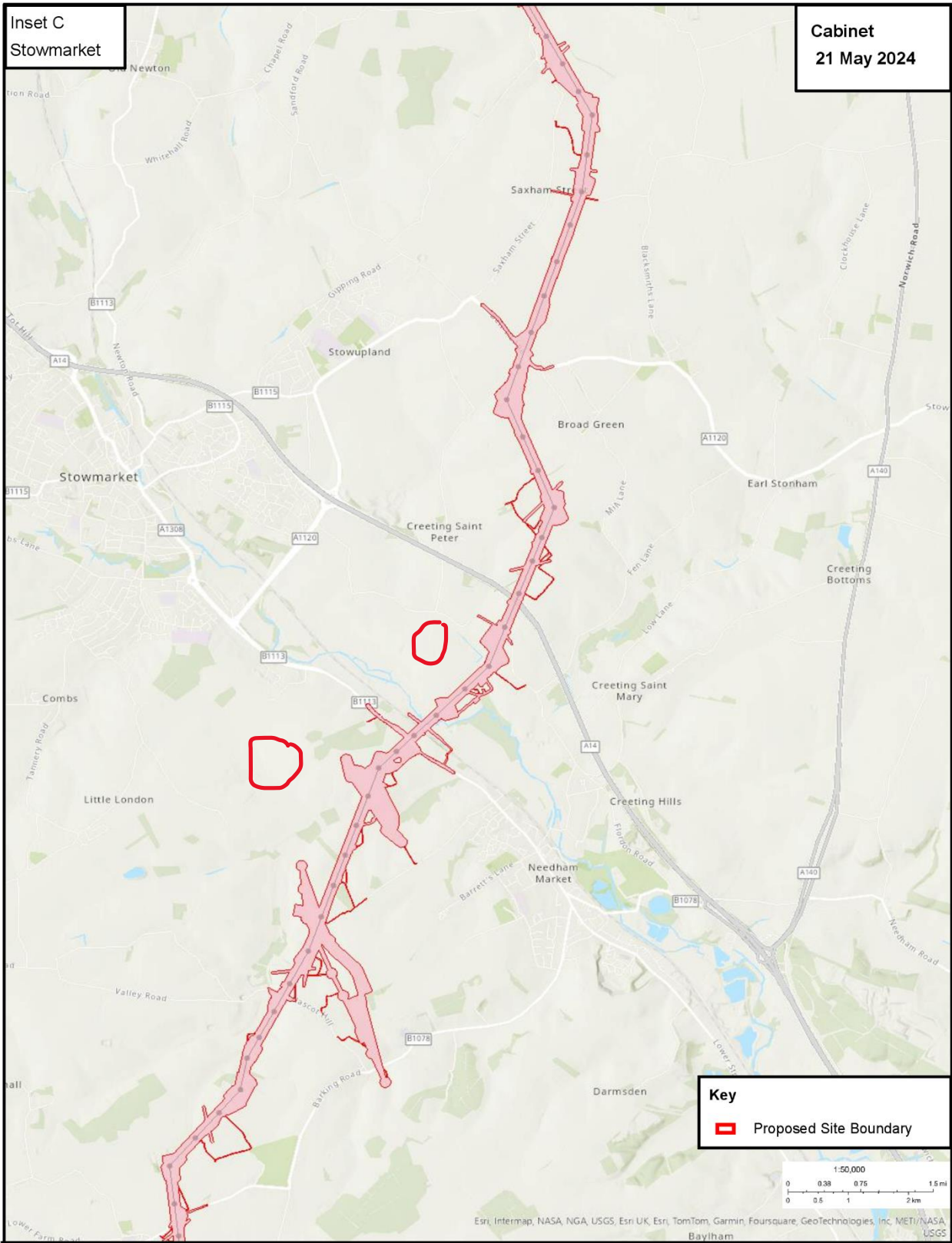
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Stowmarket

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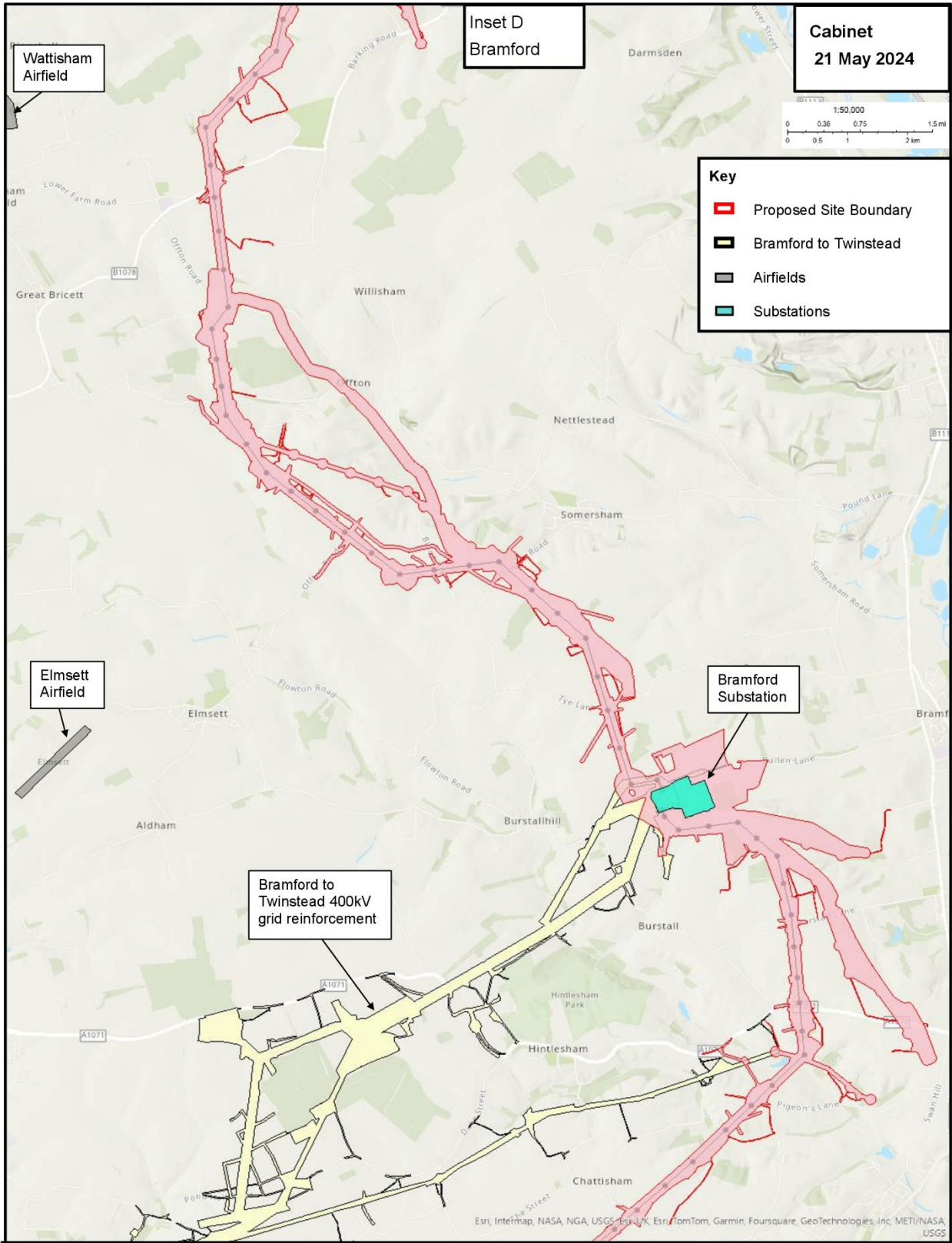
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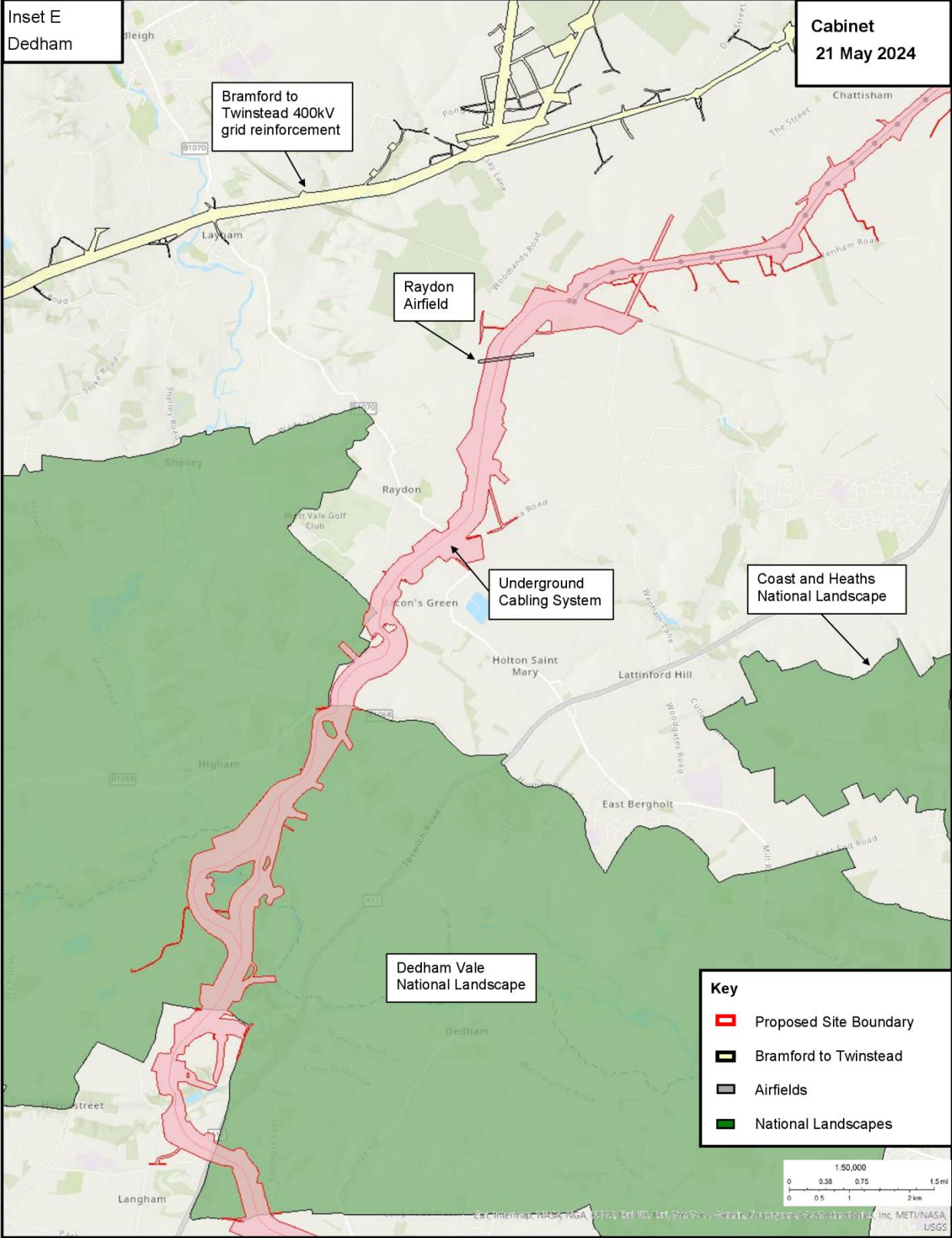
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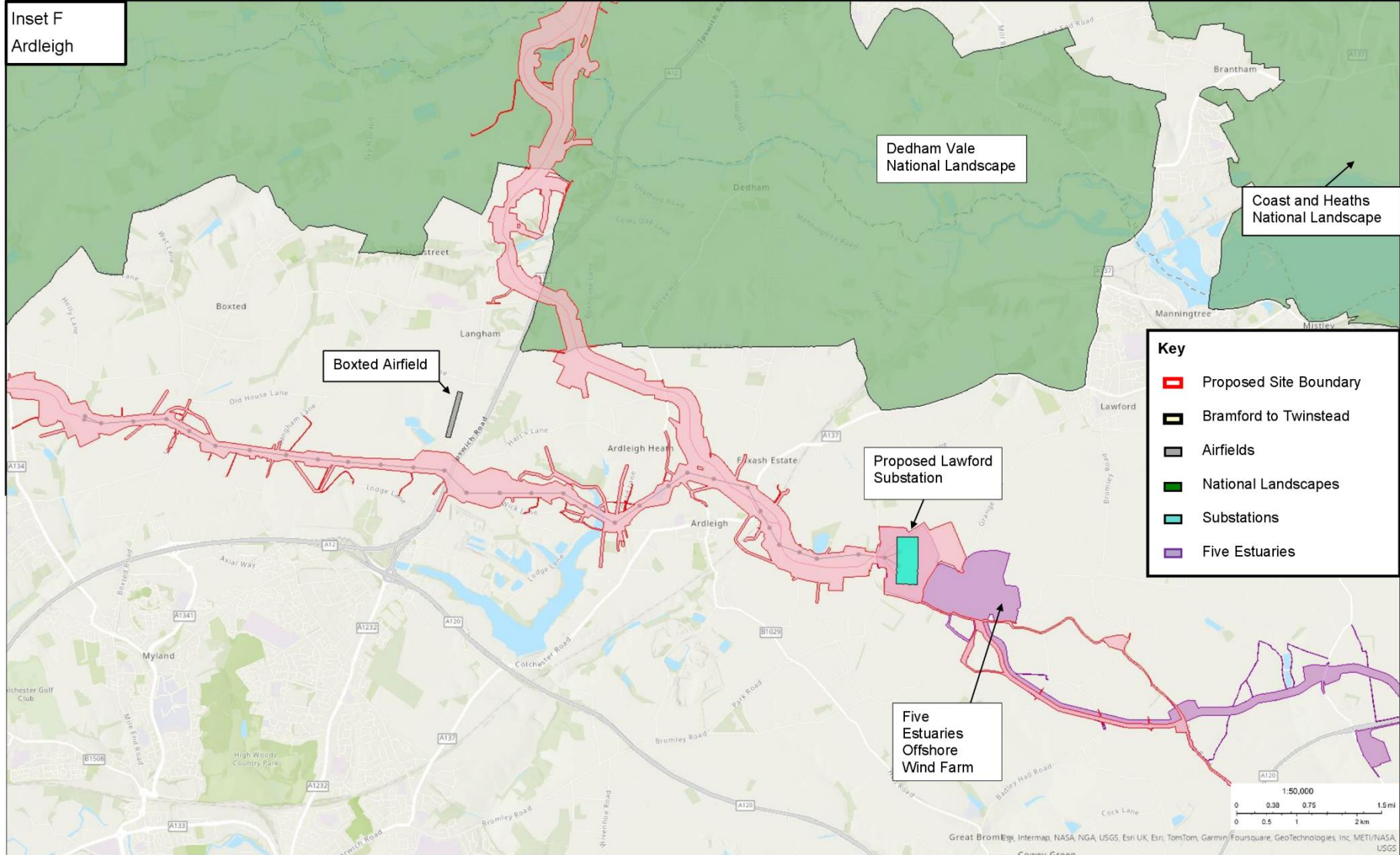
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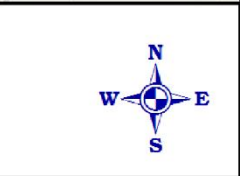
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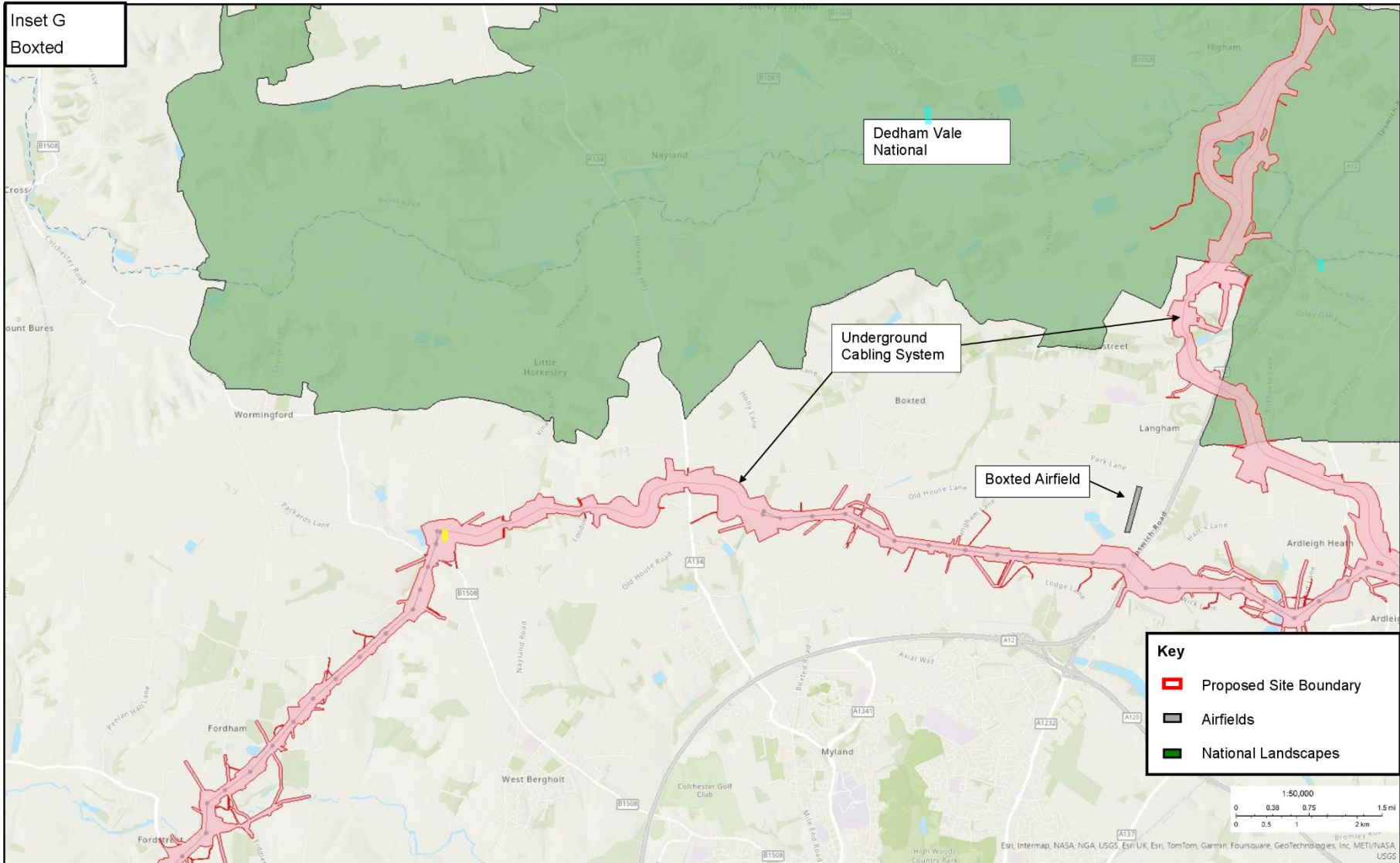
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