

**The Great Grid Upgrade**

Norwich to Tilbury

# Environmental Implications of Change – Suffolk 1

January 2025

**nationalgrid**

AENC-ARC-CNS-REP-0002

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# 1. Environmental Implications of Change – Suffolk 1

## 1.1 Introduction
















- 1.1.1 This Environmental Implications of Change document should be read alongside the associated Suffolk 1 targeted consultation leaflet. This Environmental Implications of Change document can also be viewed on the Project website.
- 1.1.2 Image 1 presents the Statutory Consultation design and the proposed change together with key environmental constraints using the key below.

### Key







#### Proposed land use

-  Draft order limits
-  Statutory undertaker works

#### Proposed project design details

-  New lattice pylon
-  Gantry
-  Full line tension gantry
-  New overhead line
-  Lower height pylons
-  New underground cable swathe centreline
-  New underground cable construction swathe
-  Cable sealing end compound boundary
-  Substation boundary
-  New underground cable trenchless crossing
-  Permanent access route including visibility splays (substations and cable sealing end compound)
-  Existing DNO lattice pylon - to be dismantled
-  Existing DNO lattice pylon - to be modified
-  Existing DNO overhead line - to be dismantled
-  Existing DNO overhead line - to be modified

#### Temporary works

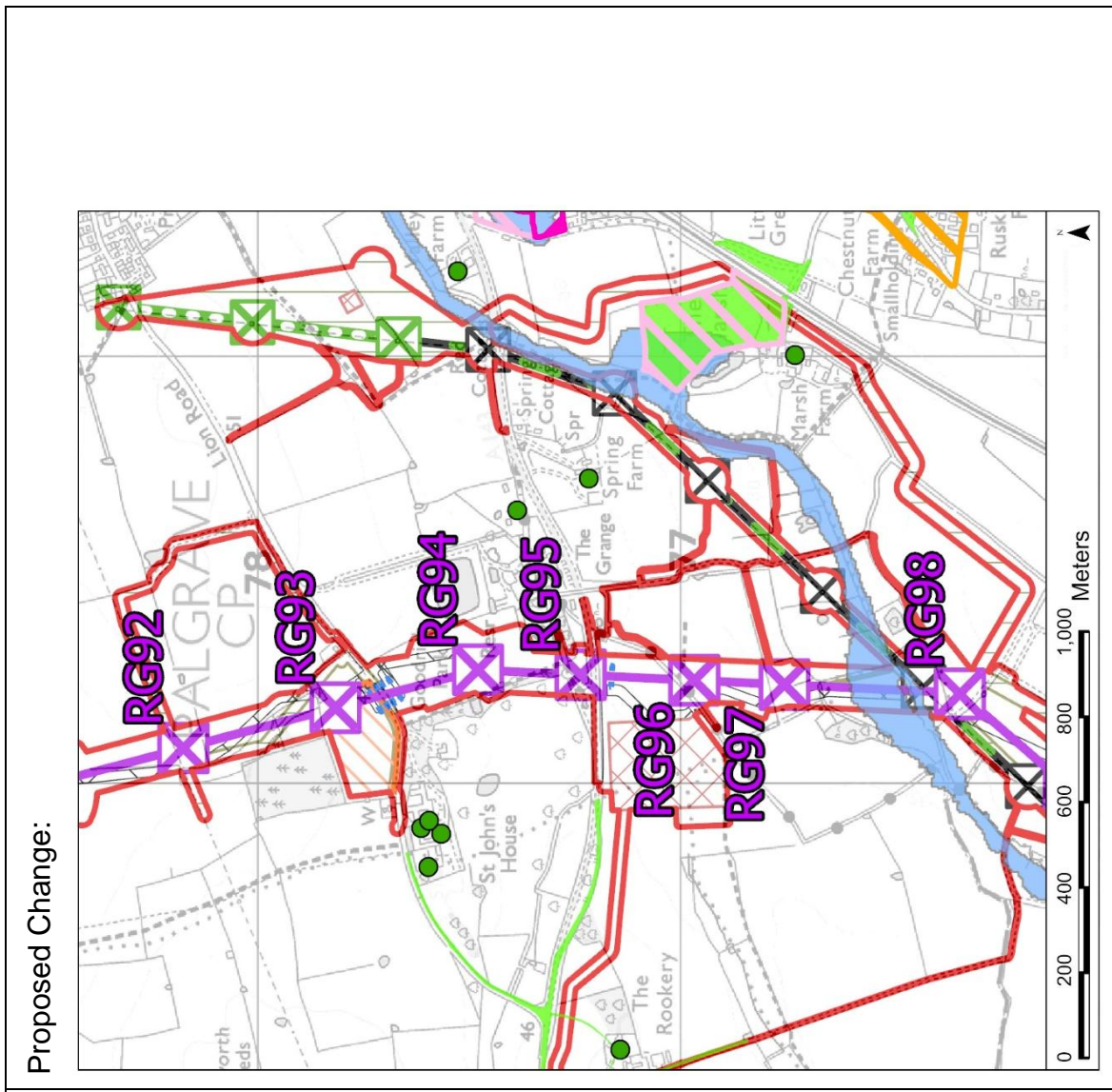
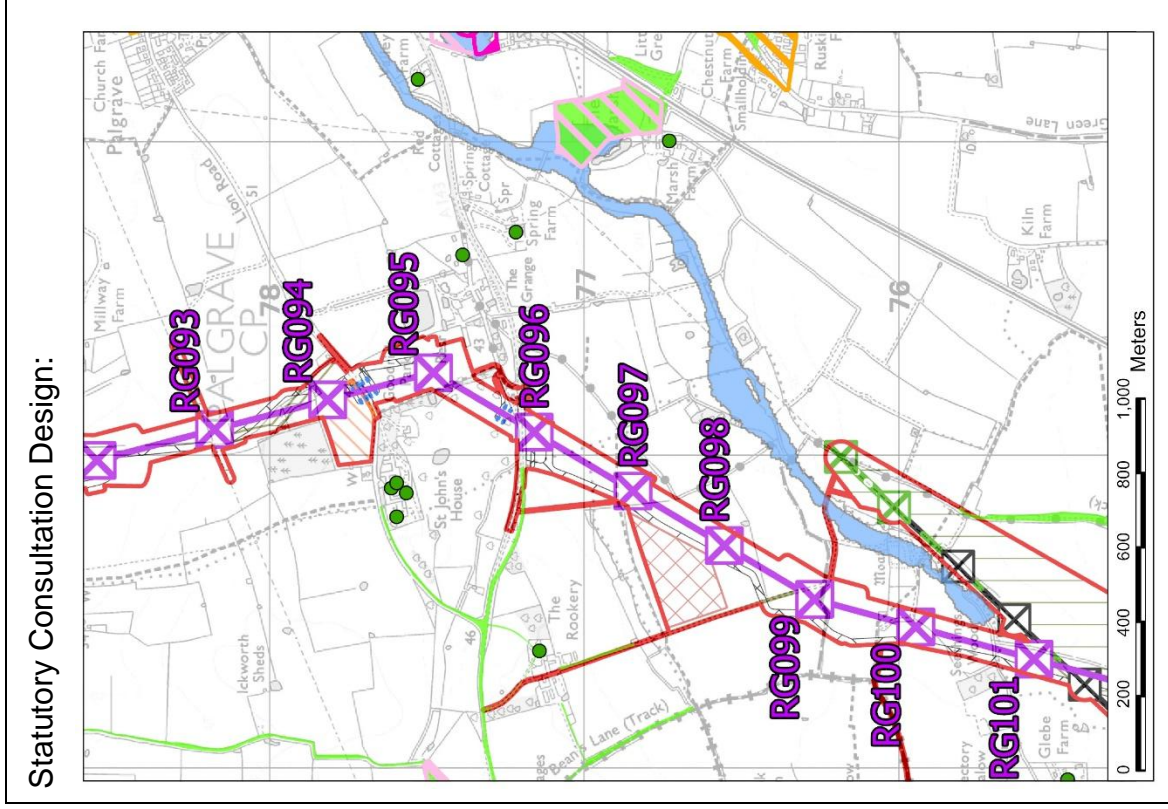
-  Site access, crossover points and visibility splays
-  Haul roads
-  Haul roads for underground cable, cable sealing end compounds and substation works
-  Crossing protection work area
-  Construction compound
-  Construction laydown area

#### Environmental constraints

##### Listed Buildings

-  Grade I
-  Grade II
-  Grade II\*
-  Local Nature Reserves
-  Scheduled Monument
-  Conservation Areas
-  Special Areas of Conservation
-  Sites of Special Scientific Interest
-  County / Local Wildlife Sites
-  Registered Parks and Gardens
-  Countryside and Rights of Way Open Access Land
-  National Landscape (an Area of Outstanding Natural beauty)
-  Ancient Woodland
-  Flood Zone 3

**Image 1: Proposed Change**



## 1.2 Environmental Implications of Change

- 1.2.1 We have reviewed the proposed change set out in the consultation information leaflet and its likely environmental implications against the preliminary assessment reported in the Preliminary Environmental Information Report (PEIR) published as part of our summer 2024 statutory consultation. We have undertaken this review against each of the technical topics covered by the PEIR, with respect to this location within the Project, including: agriculture and soils; air quality; ecology and biodiversity; contaminated land, geology and hydrogeology; health and wellbeing; historic environment; hydrology, land drainage and flood risk; landscape and visual; noise and vibration; socio-economics, recreation and tourism; and traffic and transport. We have applied the same methodologies and principles set out in the PEIR based on the information available and recognising that the Project is the subject of ongoing consultation and environmental surveys.
- 1.2.2 For information on the environmental implications of a change following our review, National Grid has produced an ‘Environmental Implications of Change document’ (EIC), like this one, with location reference to the specific area where the proposed change is located.
- 1.2.3 The table below outlines the environmental implications of a change which is proposed as a result of feedback received during statutory consultation in 2024. The information provided here is proportionate and appropriate information on the environmental implications when looked at both in local context and in the context of the project as a whole.

<b>Environmental Topic</b>	<b>Comments / observations / identified environmental implications of the proposed change when compared to the preliminary assessment presented in the PEIR</b>
Agriculture and Soils	The proposed change would increase the length of underground cabling within Provisional Agricultural Land Classification Grade 2 and 3 land, increasing the potential of best and most versatile land being affected during construction. However, there would be no change to the type or significance of agriculture and soil effects as a result of the proposed change, when compared to the design and PEIR presented at statutory consultation.
Air Quality	There would be no change to the type or significance of air quality effects as a result of the proposed change, when compared to the design and PEIR presented at statutory consultation.
Ecology and Biodiversity	<p>The proposed change increases the amount of underground cabling. While the majority of the proposed additional underground cabling goes through arable land, the alignment does pass through Thrandeston Marsh Local Wildlife Site designated for its wet grassland habitat. This would require additional mitigation measures to reduce any likely effects.</p> <p>The proposed change crosses additional well-defined field boundaries with mature planting bands (including hedgerows and woodland bands) therefore would have a greater effect on these features (which are not designated features).</p>

<b>Environmental Topic</b>	<b>Comments / observations / identified environmental implications of the proposed change when compared to the preliminary assessment presented in the PEIR</b>
	However, with appropriate mitigation measures, there would be no change to the type or significance of ecology and biodiversity effects as a result of the proposed change, when compared to the design and PEIR presented at statutory consultation.
Contaminated Land, Geology and Hydrogeology	There would be no change to the type or significance of contaminated land, geology and hydrogeology effects as a result of the proposed change, when compared to the design and PEIR presented at statutory consultation.
Health and Wellbeing	The proposed change would locate the alignment closer to a number of health and wellbeing receptors, including residential properties, but further from others. There would be no change to the type or significance of health and wellbeing effects as a result of the proposed change, when compared to the design and PEIR presented at statutory consultation.
Historic Environment	<p>The proposed change would reduce over sail to the non-designated park associated with St Johns/Park House Grade II listed buildings.</p> <p>The proposed change to the alignment would be closer to Thrandeston conservation area and listed buildings located in the surrounding rural area. However, as the existing 132 kV alignment would be removed in this section for the 400 kV overhead line this would not lead to significant change to the settings of these assets that contribute to their values. The proposed change would also be further from a few listed buildings in the rural landscape to the west. Therefore, the proposed change would have no significant impact on the historic environment when compared to the design presented at statutory consultation.</p> <p>The proposed change would move the alignment to be adjacent to a non-designated moated site, however, the design presented at statutory consultation slightly over sailed this moated site on its western side and therefore the proposed change would have no significant change in effects. The proposed greater length of underground cabling for the 132 kV increases the distance over which there could be impacts to currently unknown archaeology, however, the width of the proposed works has reduced so there is no significant change in the total area of currently unknown archaeology that could be affected.</p> <p>During construction, the proposed change would locate the underground cabling works over 800 m to the east of the design presented at statutory consultation and the location of RG095. It is possible these construction works would affect the settings of Grade II listed Valley Farm House (1032791), Marsh Farm House (1032768) and the Thrandeston conservation area and its Grade I, II*, and II listed buildings on a temporary basis during construction. However, the short term and temporary nature of the works, combined with the benefit of removing the existing 132 kV overhead line in this location</p>

<b>Environmental Topic</b>	<b>Comments / observations / identified environmental implications of the proposed change when compared to the preliminary assessment presented in the PEIR</b>
	<p>means that overall, the proposed change is not expected to significantly alter the historic environment effects.</p> <p>Overall, there would be no change to the type or significance of historic environment effects as a result of the proposed change, when compared to the design and PEIR presented at statutory consultation.</p>
Hydrology, Land Drainage and Flood Risk	<p>There would be no change to the type or significance of hydrology, land drainage and flood risk effects as a result of the proposed change, when compared to the design and PEIR presented at statutory consultation.</p>
Landscape and Visual	<p>The proposed change to the alignment would cross part of a shallow valley with smaller-scale fields and well-defined field boundaries with mature vegetation (including hedgerows and trees). This is a more intimate, well-vegetated and sparsely populated landscape than the design presented at statutory consultation, which passes through lightly rolling arable fields. The proposed change to the alignment would move the overhead line away from the grounds of Goodrich Park / St John's House, a recreational venue used for events and camping, with a cluster of listed buildings. However, it is likely that the proposed change would be closer than the design presented at statutory consultation to visual receptors at The Grange in the north near RG095.</p> <p>There would likely be landscape and visual benefits due to the removal of the additional length of 132 kV overhead line. This would reduce the sense of 'encirclement' experienced by properties north and south of the A143 (eg Spring Farm, The Grange). The proposed extension to the 132 kV removal would result in a longer underground cable route that would cross additional watercourses and an area of Countryside and Rights of Way Registered Common Land at Thrandeston Marsh. The proposed change would bring the underground cable alignment closer to properties including Marsh Farm, although visual effects would be temporary during construction. Some mature trees within hedgerows would be affected by the underground cable alignment.</p> <p>However, overall, there would be no change to the type or significance of landscape and visual effects as a result of the proposed change, when compared to the design and PEIR presented at statutory consultation.</p>
Noise and Vibration	<p>There would be no change to the type or significance of noise and vibration effects as a result of the proposed change, when compared to the design and PEIR presented at statutory consultation.</p>
Socio-economics, Recreation and Tourism	<p>The proposed change would temporarily affect Little Green Wedding Barn and The Marsh (East Suffolk) with the proposed undergrounding diversion. Overall, however, there would be no change to the type or significance of socio-economic, recreation and tourism effects as a</p>

Environmental Topic	Comments / observations / identified environmental implications of the proposed change when compared to the preliminary assessment presented in the PEIR
	result of the proposed change, when compared to the design and PEIR presented at statutory consultation.
Traffic and Transport	There would be no change to the type or significance of traffic and transport effects as a result of the proposed change, when compared to the design and PEIR presented at statutory consultation.

## 1.3 Conclusion

- 1.3.1 The proposed change would not materially change the conclusions that were reported within the PEIR (National Grid, 2024) which was published for statutory consultation. The PEIR can be viewed [here](#).
- 1.3.2 If the proposed change is taken forwards, the baseline information (and environmental surveys) and assessment associated with this change would be provided in the Environmental Statement (ES).





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