

The Great Grid Upgrade

Norwich to Tilbury

Environmental Implications of Change – Essex 2

February 2025

nationalgrid

AENC-ARC-CNS-REP-0013

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1. Environmental Implications of Change – Essex 2

1.1 Introduction
















- 1.1.1 This Environmental Implications of Change document should be read alongside the associated Essex 2 targeted consultation leaflet.
- 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

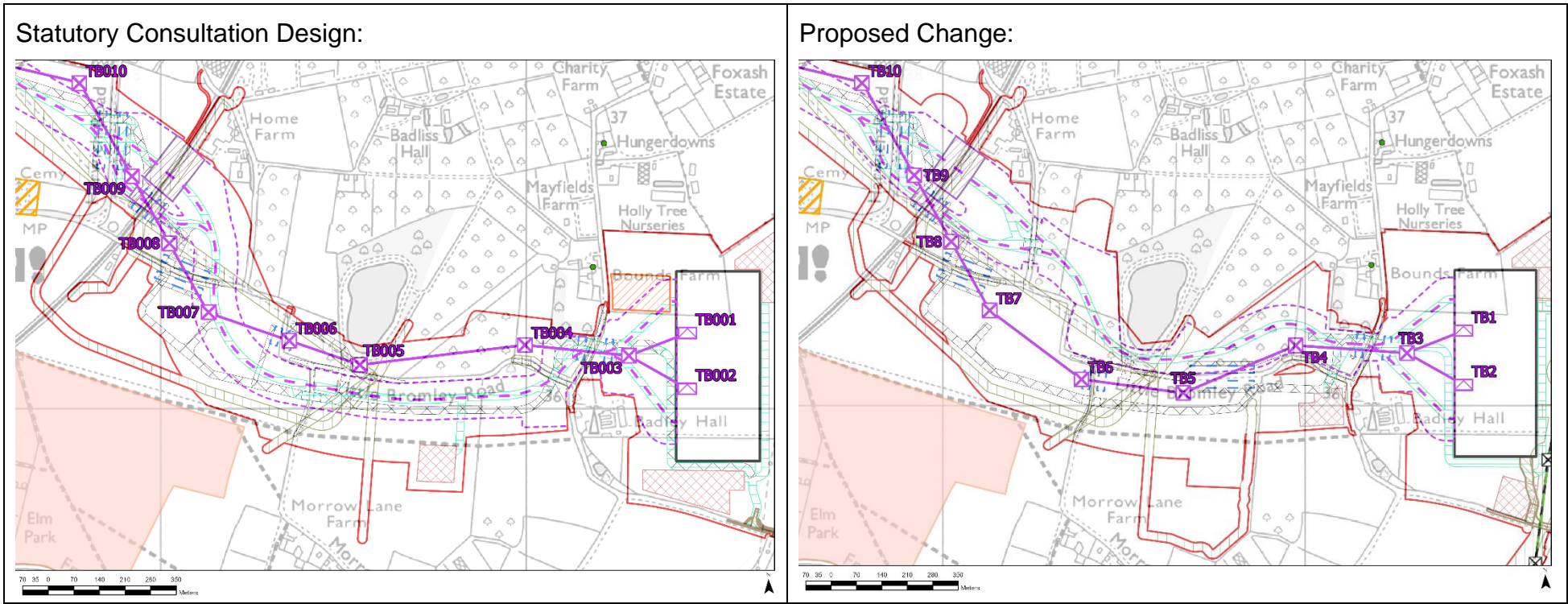
-  Site access, crossover points and visibility splays
-  Haul roads
-  Haul roads for underground cable, cable sealing end compounds and substation works
-  Crossing protection work area
-  Construction compound
-  Construction laydown area

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.

Environmental Topic	Comments / observations / identified environmental implications of the proposed change when compared to the preliminary assessment presented in the PEIR
Agriculture and Soils	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	The proposed change moves the majority of the overhead line alignment into the underground cable swathe corridor and therefore effects on habitats would already be accounted for. A larger section of a small woodland block would be affected by the proposed change to the underground cable, when compared to the design presented at statutory consultation. However, 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.

Environmental Topic	Comments / observations / identified environmental implications of the proposed change when compared to the preliminary assessment presented in the PEIR
Health and Wellbeing	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	The proposed change would move the overhead line alignment closer to the scheduled monument 'crop mark site S of Ardleigh' and the underground cable alignment further to the north away from the scheduled monument. Geophysical survey undertaken in this area has not indicated any significant archaeology within the proposed Order Limits. Therefore, 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.
Hydrology, Land Drainage and Flood Risk	The proposed change moves construction works for the overhead line further away from a lake. However, 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.
Landscape and Visual	<p>The proposed change would introduce an additional angle tower compared to the design presented at statutory consultation. There would be an additional crossing of the minor road network and the overhead line alignment would be closer to properties to the south along Morrow Lane. Vegetation loss and effects on recreational receptors at the lake would be reduced slightly compared to the design presented at statutory consultation. In terms of landscape, effects on landscape character are likely to be similar. This is because the design presented at statutory consultation and the proposed change would both introduce pylons into the Bromley Heaths landscape character area.</p> <p>There would be no change to the type or significance of landscape and visual effects as a result of the proposed change to the overhead line and underground cable alignment, when compared to the design and PEIR presented at statutory consultation</p>
Noise and Vibration	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.
Socio-economics, Recreation and Tourism	The proposed change moves the overhead line alignment further away from Paxman's Angling Club and likely to have a lower magnitude of adverse impact on the receptor but there would be no change to the type or significance of socio-economic, recreation and tourism effects as a result of the proposed change, when compared to the design and PEIR presented at statutory consultation.

Environmental Topic	Comments / observations / identified environmental implications of the proposed change when compared to the preliminary assessment presented in the PEIR
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).

National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com