

The Great Grid Upgrade

Norwich to Tilbury

Environmental Implications of Change – Essex 10

February 2025

nationalgrid

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1. Environmental Implications of Change – Essex 10

1.1 Introduction
















- 1.1.1 This Environmental Implications of Change document should be read alongside the associated Essex 10 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

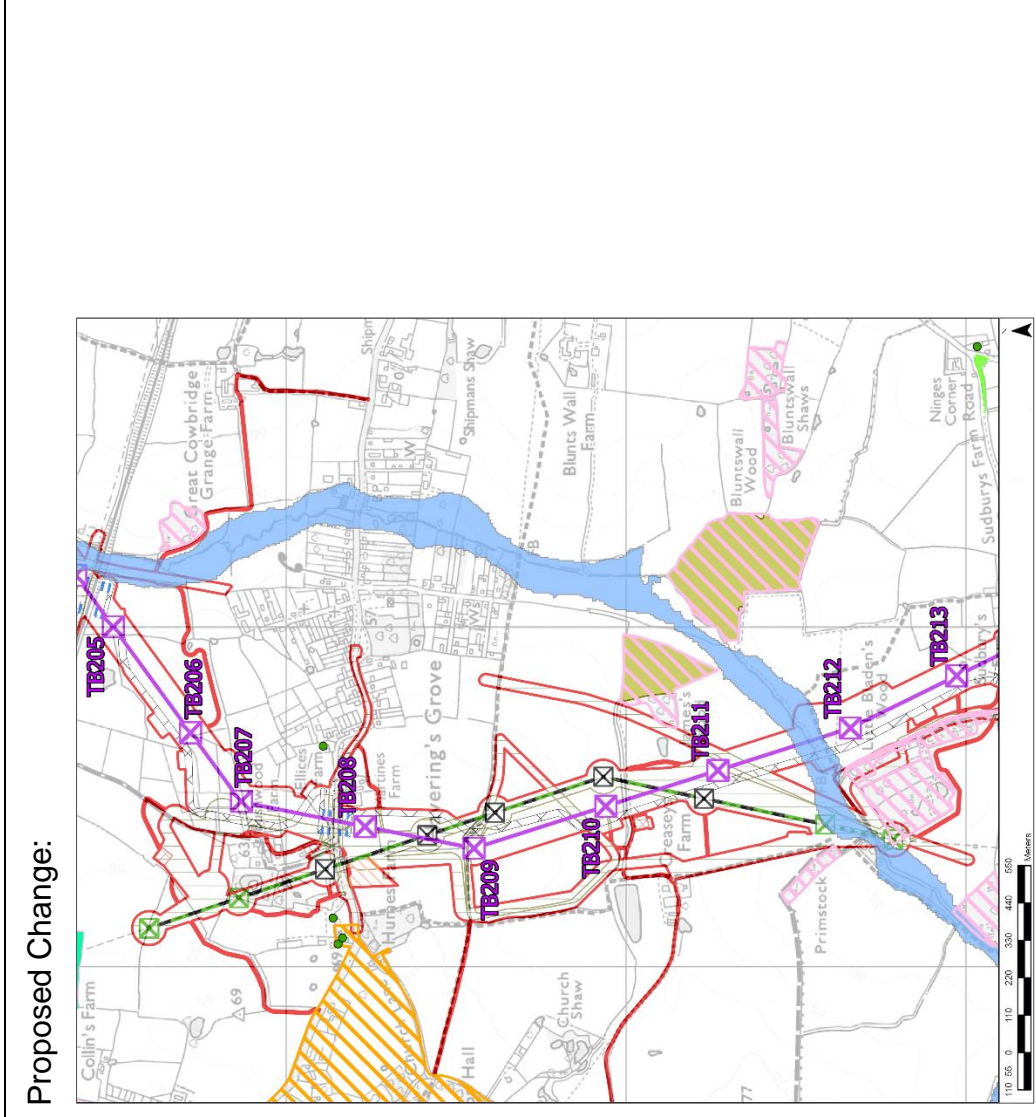
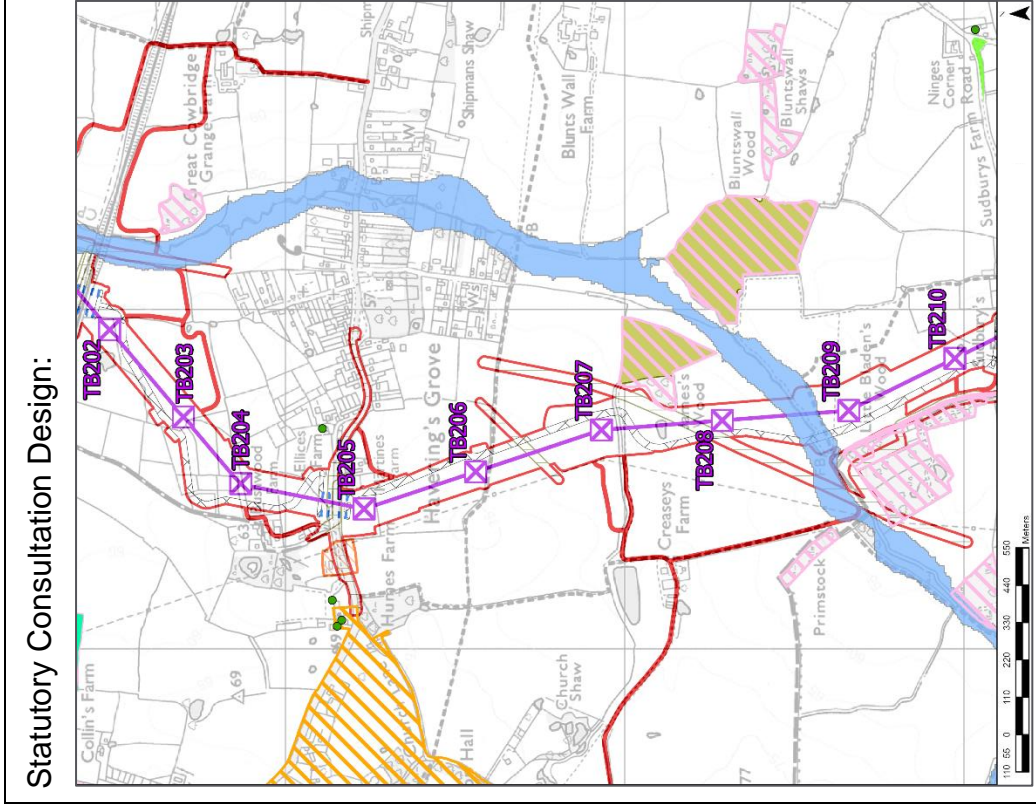
-  Site access, crossover points and visibility splays
-  Haul roads
-  Haul roads for underground cable, cable sealing end compounds and substation works
-  Crossing protection work area
-  Construction compound
-  Construction laydown area

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	Indicative mapping shows similar ‘Provisional Agricultural Land Classification’ grading and soil types to those identified for the design presented at statutory consultation. 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 moves the alignment further from St James’ Wood Local Wildlife Site which is also deciduous woodland, when compared to the design presented at statutory consultation. The proposed alignment change also avoids oversailing a pond and associated trees.</p> <p>The proposed additional underground cabling would have additional ecological effects through the temporary loss of predominantly low value habitats.</p> <p>Overall, 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.</p>

Environmental Topic	Comments / observations / identified environmental implications of the proposed change when compared to the preliminary assessment presented in the PEIR
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	<p>The proposed undergrounding change would temporarily reduce access to the nearby stables, however, the undergrounding of the existing overhead lines would reduce the visual effects of the existing overhead line on the surrounding village and residential receptors and the associated mental health effects.</p> <p>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.</p>
Historic Environment	<p>The proposed alignment change would be closer to Hutton Village conservation area, and listed buildings within the conservation area. However, the undergrounding of the existing overhead line under the proposed change would reduce the quantity of modern infrastructure in the rural landscape that contributes to Hutton Village conservation area's value in comparison with the design presented at statutory consultation.</p> <p>Any additional undergrounding would have the potential increase effects to buried archaeology.</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	There would be no change to the type or significance of hydrology, and 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 require one less angle pylon than the design presented at statutory consultation. The proposed change would be closer to residential properties at Creasey's Farmhouse to the west. The proposed change would be further from the settlement of Haverings Grove.</p> <p>The proposed change would introduce construction activity into the farmland / paddocks immediately east of Bushwood Farm, and into the Haverings Grove area.</p> <p>The undergrounding of the existing overhead line would reduce the quantity of infrastructure visible in this area during operation of the Project. This would result in a reduction in the level of effect on visual amenity, though significant effects resulting from the introduction of the Project would still occur. The undergrounding of the existing overhead line would also result in a reduction in predicted effects on landscape when compared to the design presented at statutory</p>

Environmental Topic	Comments / observations / identified environmental implications of the proposed change when compared to the preliminary assessment presented in the PEIR
	<p>consultation. This is due to a reduction in the likely magnitude of change to landscape character.</p> <p>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 undergrounding of the existing overhead line would result in temporary construction effects at Woodland School Hutton Manor and Oakleigh Farm Horse Livery Stables. However, the undergrounding of the existing overhead line could improve visual amenity in the area during operation.</p> <p>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.</p>
Traffic and Transport	<p>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.</p>

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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