

The Great Grid Upgrade

Norwich to Tilbury

Environmental Implications of Change – Essex 8

February 2025

nationalgrid

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1. Environmental Implications of Change – Essex 8

1.1 Introduction
















- 1.1.1 This Environmental Implications of Change document should be read alongside the associated Essex 8 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

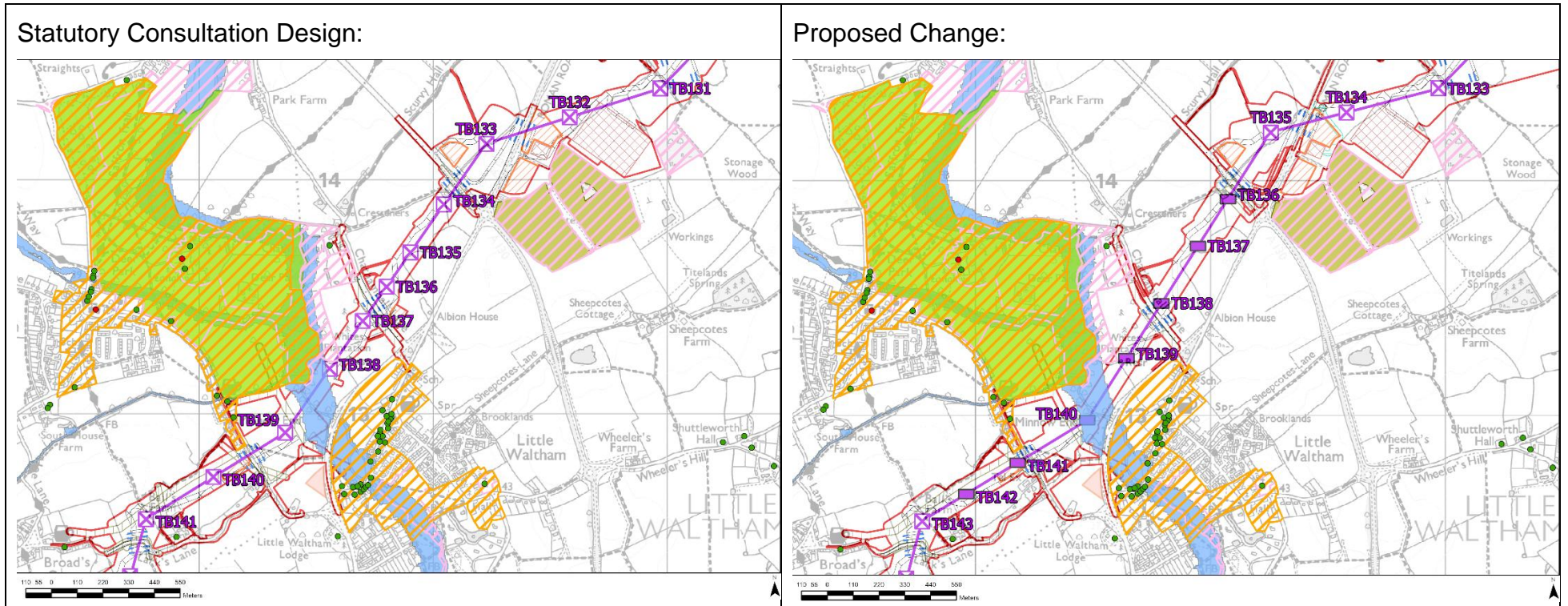
-  Site access, crossover points and visibility splays
-  Haul roads
-  Haul roads for underground cable, cable sealing end compounds and substation works
-  Crossing protection work area
-  Construction compound
-  Construction laydown area

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.

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 across as per 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	The proposed change would move the alignment further away from Langley’s Deer Park Local Wildlife Site. In addition, greater vegetation clearance would be needed for the proposed low height towers. However, with appropriate mitigation, 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	<p>The main designated heritage assets that would be affected by the Project are the grade I listed Langleys House and its associated Grade II registered park and garden, the conservation areas of Great Waltham (which encompasses most of Langleys registered park and garden) and Little Waltham. Within the settlements of Great Waltham and Little Waltham there are a number of Grade II listed buildings and in Great Waltham there are two Grade II* listed buildings and the Grade I listed Church of St Mary and St Lawrence. Adjacent to Little Waltham Conservation Area there is a scheduled monument 'Settlement site at Ash Tree Corner'.</p> <p>The proposed change would move the alignment further away from the edge of Langley's Grade II registered park and garden when compared to the design presented at statutory consultation. The proposed change would also be further from Grade II listed Chatham Hall and Great Waltham Conservation Area but slightly closer to Little Waltham Conservation Area.</p> <p>Following feedback from Historic England and others during statutory consultation, modifications to the design in this area have been considered and a design using low height pylons is assessed to reduce adverse impacts on the designated heritage assets in this area. The low height pylons would remove views of pylons or reduce the proportion of the pylon that could be seen from locations within both Conservation Areas and, within Langleys registered park and garden (refer to the visualisations at Annex A). While the pylons would still cause an adverse impact through change to the setting for the closest edges of the Conservation Areas, registered park and garden and some listed buildings the overall scale of adverse impacts would be reduced.</p> <p>The low height pylons would significantly reduce the visibility of the pylons from views from the back of Langleys House (refer to the visualisations at Annex A). Therefore, the impacts to Langleys House would be significantly reduced in comparison with the design presented at statutory consultation.</p> <p>Overall, there would be a reduction in the significance of historic environment effects as a result of the proposed change, when compared to the design and PEIR presented at statutory consultation. This is considered to be 'less than substantial harm' in the context of Policy EN1. Any harm has and will continue to be considered in the context of Policy EN1 and the wider public benefits that the proposals will bring.</p>

Environmental Topic	Comments / observations / identified environmental implications of the proposed change when compared to the preliminary assessment presented in the PEIR
Hydrology, Land Drainage and Flood Risk	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 move the alignment further away from Chatham Hall Bungalow but moves the alignment closer to Albion House when compared to the design presented at statutory consultation. The proposed change would also alter some pylon locations, most notably bringing a pylon into closer proximity to Windmill House on Chelmsford Road.</p> <p>The reduction in height of the pylons would be beneficial in more distant views, such as those from within, and to the west of, Langley's Registered Park and Garden, from the wider footpath network (including the Saffron Trail and Essex Way), and from the settlements at Great Waltham and Little Waltham, including the Conservation Areas. The lower height would result in the tops of the pylons being less visible on the skyline and more fully screened than standard height pylons. Screening at this location is provided by existing intervening mature trees, including those on the edge of the deer park and the Registered Park and Garden, and west of Little Waltham. In relation to closer views, the benefit resulting from the reduction in height would be balanced out by the wider, heavier (in terms of steelwork) and more squat appearance of the lower height pylons. Furthermore, due to changes in location of the pylons, some would be closer to receptors. This would affect visual receptors in the local community (including people living along Chelmsford Road in Minnow End), and those using the Public Rights of Way (PRoW) and road networks (refer to the visualisations at Annex A).</p> <p>The closest visual receptors are unlikely to experience a benefit, and the impact is likely to remain the same or slightly greater due to the heavier and wider nature of the low height structures, and in some cases, increased proximity. More distant visual receptors will experience a benefit with the tops of the lower height pylons being less visible in views where trees, topography and intervening buildings provide screening.</p> <p>In terms of landscape, effects on landscape character are likely to be similar due to the introduction of 400 kV steel lattice pylons into the shallow valley area between Little Waltham and Great Waltham.</p> <p>Overall, whilst there are some benefits and disbenefits, 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	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.

Environmental Topic	Comments / observations / identified environmental implications of the proposed change when compared to the preliminary assessment presented in the PEIR
Socio-economics, Recreation and Tourism	The proposed change would result in the reduction in height of pylons which have less effect in relation to perceived visual amenity, however, there would be no change to the type or significance of socio-economics, recreation and tourism effects as a 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).

Annex A - Visualisations

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