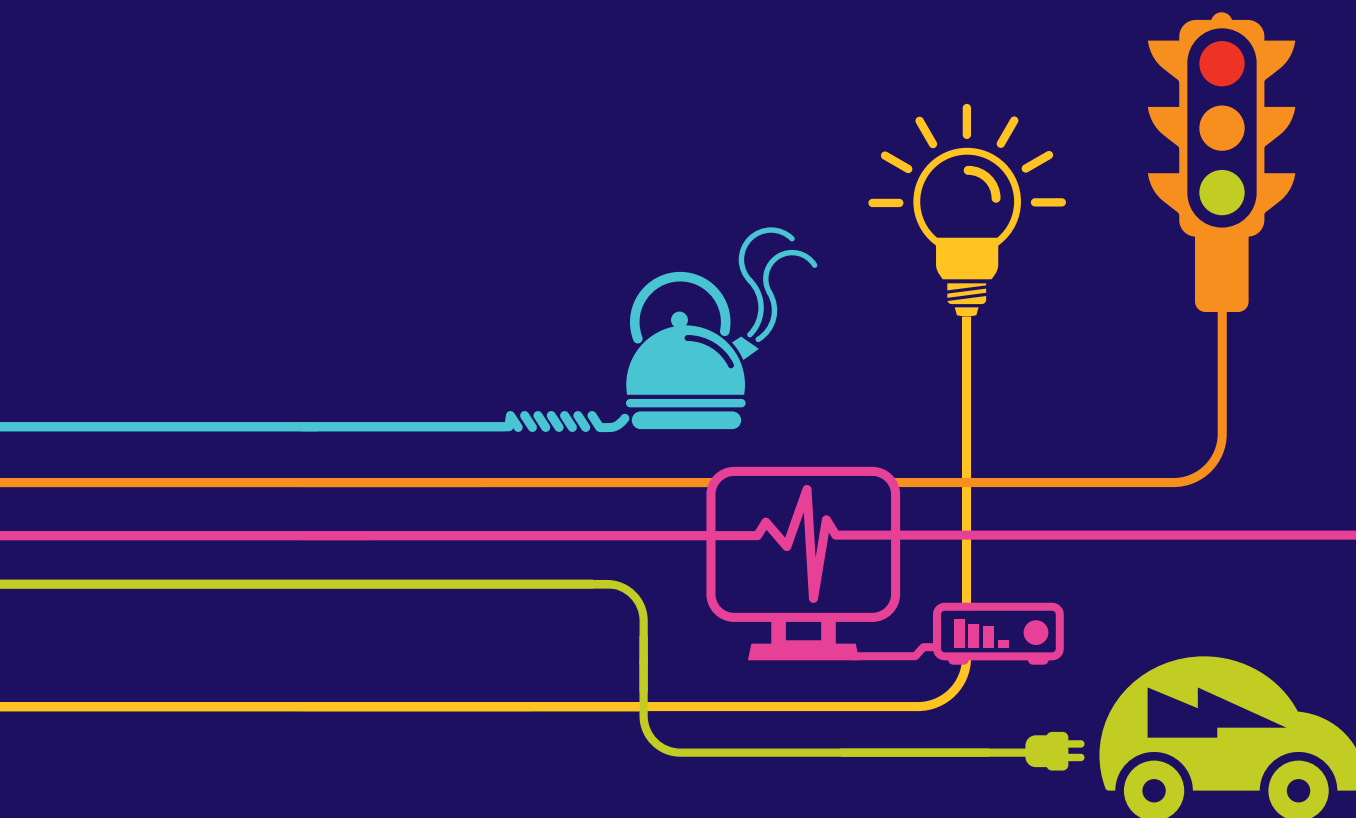


# Environmental Statement Wessex Water Realignment

## Hinkley Point C Connection Project

*Regulation 5(2)(q) of the Infrastructure Planning  
(Applications: Prescribed Forms and Procedure)  
Regulations 2009*





**Hinkley Point C Connection Project**

**February 2015**

**VOLUME 5.31 – ENVIRONMENTAL STATEMENT - WESSEX WATER REALIGNMENT**



Document Control			
Document Properties			
Organisation		National Grid	
Author		Hilary Brett, TEP	
Approved By		Ian Grimshaw, TEP	
Title		Environmental Statement – Wessex Water Realignment	
Document Reference		Volume 5.31	
Date	Version	Status	Description/Changes
27/01/2015	A	Live	New document for submission to PINS



## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>7</b>
1.1	Background .....	7
1.2	Proposed Realignment .....	8
1.3	Identification of New Receptor .....	8
1.4	Review of the Environmental Statement .....	9
<b>2</b>	<b>Landscape and Views .....</b>	<b>10</b>
2.1	Introduction .....	10
2.2	Baseline .....	10
2.3	Potential Effects during Operation and Construction .....	10
<b>3</b>	<b>Biodiversity and Nature Conservation.....</b>	<b>13</b>
3.1	Introduction .....	13
3.2	Potential Effects during Operation and Construction .....	13
<b>4</b>	<b>Historic Environment .....</b>	<b>16</b>
<b>5</b>	<b>Traffic and Transport .....</b>	<b>17</b>
<b>6</b>	<b>Air Quality and Emissions .....</b>	<b>18</b>
6.1	Introduction .....	18
6.2	Prediction and Assessment of Significance of the Potential Effects .....	18
<b>7</b>	<b>Noise and Vibration.....</b>	<b>19</b>
7.1	Introduction .....	19
7.2	Prediction and Assessment of Significance of the Potential Construction and Decommissioning Noise Effects .....	19
7.3	Prediction and Assessment of Significance of the Potential Operational Noise Effects .....	19
<b>8</b>	<b>Arboricultural Impact Assessment .....</b>	<b>20</b>
<b>9</b>	<b>Summary .....</b>	<b>21</b>



## 1 INTRODUCTION

### 1.1 Background

- 1.1.1 National Grid Electricity Transmission plc (National Grid) has submitted a Development Consent Order (DCO) application under the Planning Act 2008 to seek powers to construct, operate and maintain a new 400,000 volt (400kV) connection between Bridgwater, Somerset and Seabank Substation, north of Avonmouth, together with various associated development and other works ('the Proposed Development'). The application was submitted to the Planning Inspectorate (PINS) on the 28 May 2014. PINS confirmed that the application has been accepted for examination on 17 June 2014 (reference number. EN020001).
- 1.1.2 An Environmental Statement (ES) was submitted as part of the DCO application. The ES was prepared in accordance with the Planning Act 2008, The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (SI 2009/2263) ('the 2009 Regulations') and The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009. The submitted ES comprises **Volumes 5.1 to 5.27** of the DCO application submission. On 01 October 2014 National Grid submitted errata and supplementary information to PINS in response to advice given pursuant to Section 51 of the Planning Act 2008. This included the Ecology Survey Update Report (**Volume 5.28**) and at this time National Grid also submitted the Environmental Statement Sensitivity Test (**Volume 5.29**).
- 1.1.3 Following the submission of the DCO application, supplementary information and ES Sensitivity Test, discussions have continued with those persons with an interest in land affected by the Proposed Development. This has included discussions with Wessex Water, a Statutory Undertaker operating in the area of the Proposed Development, whose land the Proposed Development crosses. During these discussions Wessex Water highlighted the recent construction of an extension to their facility at the Wessex Water Sewage Treatment Works site, Kings Weston Lane, Avonmouth.
- 1.1.4 These works, carried out using Wessex Water's permitted development rights, form an extension to the existing treatment works and lie within the DCO Order Limits. The Proposed Development would result in the new extension being oversailed by the 400kV overhead line.
- 1.1.5 The oversailing 400kV overhead line would make future maintenance of the recently extended Wessex Water site impossible without switching off the 400kV line and removing its wires.
- 1.1.6 Following discussions between National Grid and Wessex Water since submission of the DCO application, a minor realignment of the Proposed Development is proposed at this location, the effect of which would be to alter the 400kV overhead line alignment in order to avoid the recently extended site.



## 1.2 Proposed Realignment

- 1.2.1 The proposed realignment is between proposed 400kV lattice pylons LD120 and LD122. The change entails a 51.6m movement of pylon LD121 to the south east as well as a 1.8m height increase. This move would reduce the angle on both pylons LD120 and LD122 to approximately 10° from 17.8° and 16.2° respectively. The proposed realignment is shown on the updated **Works Plans for Section G-Avonmouth (Volume 4.1.8A)**.
- 1.2.2 The Order Limits, identified in the Proposed Development Plans (see **Volume 5.3.3, Figure 3.1** and **Figure 3.2**) detail the anticipated maximum extent of land in which the Proposed Development may take place (if approved and subject to Development Consent Order Requirements and any other associated commitments). The proposed route of the overhead lines and underground cables are also subject to Limits of Deviation (LoD) described in the ES (**Volume 5.5, section 5.6**).
- 1.2.3 The proposed realignment is located within the Order Limits. The proposed realignment falls outside the 400kV overhead line lateral LoD identified at **Volume 5.3.3, Figure 3.1.18** as described in the ES.
- 1.2.4 The revised lateral 400kV overhead line LoD associated with the proposed realignment is shown at **Volume 4.1.8A Works Plans Section G - Avonmouth**. The revised LoD has been used for the purposes of the assessment contained within this document.
- 1.2.5 The ES assessed a pylon height of 46.5m (detailed at **Volume 5.3.1, Table 3.4**) with a vertical LoD of +4m. The realignment requires an increase in height of pylon LD121 by 1.8m (from 46.5m to 48.3m); the vertical LoD of + 4m still applies. A maximum height of 52.3m for pylon LD121 has therefore been used for the purposes of this assessment.
- 1.2.6 In light of the proposed realignment, the assessments reported in the ES have been reviewed to ensure any potential effects of the Proposed Development have been identified and assessed.

## 1.3 Identification of New Receptor

- 1.3.1 St Anthony's Park gypsy and travellers' site is on Kings Weston Lane, adjacent to the slip road for Junction 18A of the M5. This site is identified within the South Gloucestershire and Bristol – Gypsy, Travellers and Travelling Showpeople Accommodation Assessment (January 2014), as a transit site providing 20 pitches, with an additional 20 emergency stopping place pitches.
- 1.3.2 Throughout the ES survey period this site has not been occupied, and was not identified as a receptor requiring consideration during the pre-submission discussions with Bristol City Council. St Anthony's Park was not identified as a receptor in the ES. However during a site visit undertaken in September 2014 a number of travellers were using the site. This has led to the site's inclusion as a receptor in this assessment.

## **1.4 Review of the Environmental Statement**

- 1.4.1 In light of the proposed realignment and the identification of the new receptor, the assessments reported in the ES have been reviewed to ensure any potential effects of the proposed realignment have been identified and assessed.
- 1.4.2 Following the review of the ES, it was identified that there is potential for the proposed realignment to change the following assessments:
- Landscape (ES **Volume 5.6**);
  - Views (ES **Volume 5.7**);
  - Biodiversity and Nature Conservation (ES **Volume 5.8**);
  - Historic Environment (ES **Volume 5.11**);
  - Traffic and Transport (ES **Volume 5.12**);
  - Air Quality and Emissions (ES **Volume 5.13**);
  - Noise and Vibration (ES **Volume 5.14**); and
  - Arboricultural Impact Assessment (ES **Volume 5.21**).
- 1.4.3 The review found that the proposed realignment has no potential to alter the following assessments presented in the ES:
- Ground Environment (ES **Volume 5.9**);
  - Hydrology and Water Resources (ES **Volume 5.10**);
  - Socio-Economics and Land Use (ES **Volume 5.15**);
  - Electric and Magnetic Fields (ES **Volume 5.16**); and
  - Cumulative Effects (ES **Volume 5.17**).

### **Purpose of this Document**

- 1.4.4 This document describes any changes to the assessments reported in the ES as a result of the realignment in relation to the environmental topic areas described at paragraph 1.4.2. In addition the document describes any predicted effects of the Proposed Development on the newly identified receptor at St Anthony's Park.

## 2 LANDSCAPE AND VIEWS

### 2.1 Introduction

- 2.1.1 The proposed realignment and potential effects on St Anthony's Park have been assessed in accordance with the method for the landscape assessment set out in the ES **Volume 5.6.1, section 6.3** and the method for visual assessment set out at ES **Volume 5.7.1, section 7.3**. This chapter should be read in conjunction with **Volume 5.6** and **5.7** of the ES.

### 2.2 Baseline

- 2.2.1 The extension to the existing Wessex Water Sewage Treatment Works site forms part of the baseline environment for landscape and views in Section G.
- 2.2.2 The extension at the Wessex Water Sewage Works does not significantly change the landscape and visual baseline potentially affected by the Proposed Development. The extension is consistent with the scale and built form of the surrounding area which is heavily influenced by the Wessex Water Sewage Treatment works, large scale industrial buildings, the M49 and M5 motorways and existing overhead lines comprising the existing G Route and BW Route.
- 2.2.3 The 20 pitch (+ 20 emergency stopping place pitches) transit site at St Anthony's Park is presently occupied and is included as a visual receptor as part of this assessment.
- 2.2.4 St Anthony's Park is the closest visual receptor to the proposed realignment and the BW Route conductors oversail the site with a pylon near to the eastern boundary. Visual receptors have existing views along the BW Route and across scrub towards the G Route which is parallel to the north visible above mature vegetation and trees along the boundary of St Anthony's Park. The M49 and M5 motorways are to the southern boundary and largely obscured by field boundary vegetation and trees. To the north the Wessex Water Sewage Treatment Works is partially visible above mature hedgerow and trees with a large industrial unit visible to the west on Avonmouth Way. Trees and vegetation near Ballast Lane filter views northwest with industrial development partially visible in the distance at land at Access 18. Visual receptors in St Anthony's Park are of medium sensitivity with views considered to be of high susceptibility to change and local value.

### 2.3 Potential Effects during Operation and Construction

- 2.3.1 The proposed realignment of the 400kV overhead line between pylon LD120 and LD122 would result in pylon LD121 moving 51.5m southeast and increasing in height by 1.8m. This would include a less direct alignment between LD120 and LD122 but would reduce the angle on both pylons LD120 and LD122. The proposed realignment would result in pylon LD121 being closer to the BW Route. The proposed realignment would result in reduced loss of hedgerow but increased permanent loss of two tree groups adjacent to the M49 motorway (detailed in the

Arboricultural Impact Assessment at Chapter 8 of this document and shown at **Volume 4.7.8B Trees and Hedges to be Removed or Affected Plans Section G-Avonmouth**).

### **Landscape**

- 2.3.2 Landscape effects during construction and operation for Section G, as described in the ES (**Volume 5.6, section 6.5**), would not change as a result of the proposed realignment of the 400kV overhead line; except for increased loss of young trees adjacent to the M49 motorway.
- 2.3.3 The 400kV overhead line on the proposed realignment, the proposed 132kV underground cables and removal of a section of the G Route would have a low adverse magnitude of effect on Avonmouth, in the Severn and Avon Vales landscape, which is heavily influenced by dockland cranes, 132kV overhead lines and wind turbines, as well as tall and large scale industrial buildings, as described in the ES. The significance of effect on landscape character of the Proposed Development on the proposed realignment in Section G would remain **minor adverse** during construction and operation and would not change from the assessment detailed in the ES (**Volume 5.6, section 6.5**).

### **Views**

- 2.3.4 Visual effects during construction and operation as described in the ES (**Volume 5.7, section 7.5**) for Section G would not change as a result of the proposed realignment of the 400kV overhead line, notwithstanding the additional visual receptor at St Anthony's Park and increased loss of young trees adjacent to the M49 motorway. Pylon LD121 would increase by 1.8m in height, would be 51.5m closer to visual receptors using the M5 and M49 motorway, and to the south at Lawrence Weston; and 51.5m further away from PRow BCC/5/10 (visual receptor G1.F14).
- 2.3.5 Visual receptors using the M49 motorway would also have a greater number of young trees removed from adjacent to a short section of the motorway, however this would have a minimal effect on views due to the fleeting and elevated nature of views from the raised motorway embankment. Visual receptors to the west using Lawrence Weston Lane (visual receptor G1.R14), PRow BCC/6/10 (visual receptor G1.F13) and on the eastern end of Avonmouth Way would have partially filtered views of the proposed realignment and pylon LD121 that would be 1.8m greater in height than assessed in the ES.
- 2.3.6 During construction visual receptors would also have views of 132kV underground cables works, including horizontal directional drilling (HDD) works, and removal of a section of the G Route. The proposed realignment would be greater in height but further from visual receptors. The proposed realignment would result in increased permanent loss of two areas of tree groups but the change would not alter the magnitude and significance of effect on views during construction and operation. The proposed realignment would not change the **minor adverse** or **negligible** significance of visual effects predicted in the ES (**Volume 5.7**).
- 2.3.7 Visual receptors at St Anthony's Park would experience a moderate adverse magnitude of effect on views during construction. In the short term at-height work

and cranes relating to construction of the proposed 400kV overhead line and the dismantling of the G Route would be visible over field boundary vegetation including temporary scaffolding and works areas; the construction haul road would also be visible. Some trees and hedgerows would be removed during construction. The G Route removal would be visible to the north. The 132kV underground cables route construction would be visible to the north, including HDD works under the M49 motorway and the construction compound to the north on Kings Weston Lane and to the south of the motorway. Construction of the Proposed Development would be seen in close proximity with a large proportion of the view affected for the short-term. Given the proximity and extent of construction operations visible across the view the magnitude and significance of effect would be **moderate adverse**. Although this new receptor was not considered in the ES it is considered that the magnitude and significance of effect on views of the alignment originally assessed in the ES would also be **moderate adverse** during construction and there would be no change to the assessment presented in the ES.

- 2.3.8 On completion and in the short-term, the reinstated and reseeded 132kV underground cable swathe would be perceptible in some views north beyond boundary vegetation. Grassland across the cable swathe would have established within 1 to 3 years following seeding works. In the short and medium-term the G Route would be removed from views north of St Anthony's Park above boundary vegetation. The proposed 400kV overhead line on the proposed realignment would be visible close to receptors in views north and closer than the G Route removed. Receptors would experience a partial alteration to the existing view and the introduction of prominent elements in the view, however the industrial nature of views and the presence of existing overhead lines would reduce the magnitude of effect. A moderate proportion of views would be affected and there would be some backgrounding which would minimise the scale of change from the present situation and the magnitude and significance of effect would be **moderate adverse**.
- 2.3.9 Although receptors at St Anthony's Park were not considered in the ES, it is considered that the magnitude of effect on views of the ES alignment would be marginally less than that of the proposed realignment. This is because pylon LD121 on the alignment assessed in the ES would be further from receptors and 1.8m lower in height which would marginally reduce the magnitude of effect on views. However the significance of effect of the alignment assessed in the ES would be **moderate adverse** during operation and there would be no change to the assessment presented in the ES.

### **3 BIODIVERSITY AND NATURE CONSERVATION**

#### **3.1 Introduction**

- 3.1.1 The proposed realignment has been assessed in accordance with the method for the biodiversity and nature conservation assessment set out in the ES (**Volume 5.8.1, section 8.3**). This chapter should be read in conjunction with **Volume 5.8** of the ES.

#### **3.2 Potential Effects during Operation and Construction**

##### **Designated Wildlife Sites**

- 3.2.1 The area of land affected by the proposed realignment is within the Order Limits sought for the Proposed Development and covered by the scope of the desk-based assessment of designated sites presented in the ES (**Volume 5.8.1**). The proposed alignment presented and assessed in the ES runs through the Land South of Sewage Treatment Works Wildlife Network Site (WNS). The proposed realignment also runs through this WNS. No changes to effects on this WNS described in the ES are predicted to result from the realignment.

##### **Habitats**

- 3.2.2 The area of land affected by the proposed realignment is covered by the scope of the Phase 1 habitat survey (**Volume 5.8**) and arboricultural survey presented in the ES (**Volume 5.21.1**).
- 3.2.3 The proposed realignment would result in the relocation of Pylon LD121 within the same semi-improved neutral grassland field as the proposed alignment assessed in the ES. The construction access road across this field to the pylon working area is likely to be slightly shorter as a result of the realignment. No changes to effects on grassland habitats described in the ES are predicted to result from the proposed realignment.
- 3.2.4 No protected or invasive plant species were identified within the land affected by the proposed realignment.
- 3.2.5 As a result of the proposed realignment two veteran crack willows (T306 and T309) and one middle aged ash (T317) will no longer require pruning and a 28m length of hawthorn hedge (H96) will no longer require removal and replacement. However, two new groups of trees (G44 and G46) would require removal due to the electrical safety clearances of the conductors overlapping these two areas of mature plantation. G44 comprises Scots pine, white poplar, silver birch, ash and field maple. G46 comprises white poplar and hawthorn. Both plantation woodlands are associated with the M49 motorway. Taking a reasonable worst case scenario, losses from these two groups are likely to be 0.3ha (G44) and 0.025ha (G46) based on canopy cover.



- 3.2.6 These additional losses are offset in part by the retention of a 28m section of hedgerow (assessed as removed and replanted in the ES), two veteran trees and one mature tree (assessed as requiring pruning in the ES).
- 3.2.7 The additional woodland losses do not change the magnitude of effect assessed in the ES and offset measures, in the form of replacement planting, are outlined in the ES (**Volume 5.21**). No additional mitigation would be required as a result of the realignment.

### **Species**

- 3.2.8 As described above, the habitats affected by the proposed realignment comprise plantation woodland and semi-improved neutral grassland. The species receptors potentially affected are birds, bats, badgers, great crested newts and reptiles.
- 3.2.9 Dormouse could be supported by grassland and woodland habitats, but was ruled out as a receptor in this area of the Proposed Development (due in part to the small and fragmented nature of potential habitats).

### ***Birds***

- 3.2.10 The area in which the proposed realignment would occur is covered by the scope of the Breeding Bird Survey (BBS) and Wintering Bird Survey (WBS) presented in the ES (**Volume 5.8**).
- 3.2.11 The BBS identified the area covered by the proposed realignment as being “Moderate” and “Moderately High” on the Relative Species Diversity Scale and “Low” and “Moderate” on the relative Conservation Species Scale. During the WBS no waders or wildfowl or Birds of Conservation Concern (BoCC) were recorded along the area where the proposed realignment would be built. The tree losses may result in a relatively small reduction or alteration of bird nesting and foraging habitat at this location but no changes to the range or magnitude of effects on birds described in the ES are predicted to result from the proposed realignment.
- 3.2.12 Working methods to avoid impacts on nesting birds are already outlined in Biodiversity Mitigation Strategy (**Volume 5.26.3**) and no additional mitigation would be required as a result of the realignment.

### ***Bats***

- 3.2.13 The proposed realignment is outside the scope of the bat roost assessment of trees presented in the ES (**Volume 5.8**). In August 2014 additional ground-based assessments were undertaken of the trees potentially affected by the proposed realignment and this information is presented in the Ecology Update Survey Report (**Volume 5.28**).
- 3.2.14 No trees within the area affected by the proposed realignment were found to have bat roost potential. The tree losses may result in a relatively small reduction or alteration of bat foraging habitat at this location but no changes to the range or magnitude of effects on bats described in the ES are predicted to result from the proposed realignment.

***Badger***

- 3.2.15 The proposed realignment is covered by the scope of the badger desktop and field survey presented in the ES (**Volume 5.8**).
- 3.2.16 No badger setts were identified within the proposed realignment. No changes to effects on badgers described in the ES are predicted to result from the proposed realignment.

***Great crested newt***

- 3.2.17 The proposed realignment is covered by the scope of the great crested newt survey presented in the ES (**Volume 5.8**). Additional surveys were undertaken in the general area as part of the 2014 Ecology Survey Update, where access had not been possible in 2013 (the 2014 results are presented in **Volume 5.28**).
- 3.2.18 No Great Crested Newts (GCN) were identified along or within 250m of the proposed realignment. The closest GCN identified are on the opposite side of the River Avon. No changes to effects on GCN described in the ES are predicted to result from the proposed realignment.

***Reptiles***

- 3.2.19 The proposed realignment is covered by the scope of the reptile desktop and field assessment presented in the ES (**Volume 5.8**).
- 3.2.20 The habitat assessment identified 17 locations within the Order Limits as requiring a detailed reptile survey; the location of the proposed realignment was not considered sufficiently suitable to be included. No records of reptiles (either from the data search or other field surveys) were identified along the proposed realignment, although records of slow worm and grass snake were collated from the wider Avonmouth area. No changes to effects on reptiles described in the ES are predicted to result from the proposed realignment.



## 4 HISTORIC ENVIRONMENT

- 4.1.1 There are no changes to the Historic Environment assessment presented in ES (**Volume 5.11**) as a result of the proposed realignment and newly identified receptor.
- 4.1.2 Mere Bank Scheduled Monument (**Volume 5.11, Inset 11.1**) is oversailed by the existing 'G Route', and by the Proposed Development route assessed in the ES; the proposed realignment still oversails Mere Bank. The proposed realignment does not change the assessment of effect to Mere Bank and the mitigation remains as set out at **Volume 5.11, section 11.8**.
- 4.1.3 Kings Weston House, a Grade I Listed Building, is located on the top of a ridge approximately 75m above Ordnance Datum (AOD) and approximately 1.5km from the Order Limits of the Proposed Development, with views across Bristol to the east and Avonmouth to the west, as far as the Severn Bridge. The ES concluded that the heritage significance of Kings Weston House would not be affected by the Proposed Development (**Volume 5.11.2, Appendix 11B**); the Proposed Development would be viewed over a distance of 1.5km and in combination with the modern development at Avonmouth (which includes modern housing in the foreground, and cranes, wind turbines and existing pylons). The Proposed Development would therefore be an additional modern element within an already altered setting, without representing a 'tipping point' of urbanisation or industrialisation. The increase in the height of Pylon LD121 associated with the realignment does not affect this assessment and remains as stated in the ES (**Volume 5.11**).

## 5 TRAFFIC AND TRANSPORT

- 5.1.1 There are no changes to the Traffic and Transport assessment presented in ES (**Volume 5.12**) as a result of the proposed realignment and newly identified receptor. There would be no changes in the volume or nature of the construction traffic accessing the site and the findings presented in the ES are considered representative of the proposed realignment.
- 5.1.2 The proposed construction access from Kings Weston Lane, would be unaffected by the proposed realignment. However there would be minor changes to a short section of the proposed construction haul road, allowing construction workers to access the revised position of pylon LD121. The minor reduction of the haul road does not materially affect the findings of the Traffic and Transport Assessment (**Volume 5.12**).

## 6 AIR QUALITY AND EMISSIONS

### 6.1 Introduction

- 6.1.1 The proposed realignment and potential effects on St Anthony's Park have been assessed in accordance with the method set out in the ES (**Volume 5.13.1, section 13.3**). This chapter should be read in conjunction with **Volume 5.13** of the ES.

### 6.2 Prediction and Assessment of Significance of the Potential Effects

#### **Construction Phase**

##### ***Fugitive Emissions***

- 6.2.1 The realignment would result in the Proposed Development passing closer to St Anthony's Park than assessed in the ES (**Volume 5.14**), and this may result in the construction activities passing marginally closer. However, the precise locations of the construction activities are not known at this stage. It was assumed in the ES that construction activities may occur anywhere within the DCO Order Limits, which were consequently taken as the development boundary for the construction fugitive dust assessment. The proposed realignment is within the DCO Order Limits and the proposed realignment does not materially affect the findings of the ES **Volume 5.14**.

##### ***Construction Traffic Emissions***

- 6.2.2 The proposed realignment is minor and, as discussed in Chapter 5, would not result in a change in construction plant or road traffic; the proposed realignment does not materially affect the findings of the ES **Volume 5.14**.

#### **Operational Phase**

- 6.2.3 The operation of overhead lines, underground cables and cable sealing end compounds in general will not give rise to emissions to air or direct effects which could influence air quality or climate change and have been scoped out. The proposed realignment would not affect the requirement for substation plant and the impact of sulphur hexafluoride (SF<sub>6</sub>) in Gas Insulated Switchgear (GIS) would not change from the assessment presented in the ES **Volume 5.14**.

## 7 NOISE AND VIBRATION

### 7.1 Introduction

- 7.1.1 The proposed realignment and potential effects on St Anthony's Park in terms of noise and vibration have been assessed in accordance with the method set out in the ES (**Volume 5.14.1, section 14.3**). This chapter should be read in conjunction with **Volume 5.14** of the ES.

### 7.2 Prediction and Assessment of Significance of the Potential Construction and Decommissioning Noise Effects

- 7.2.1 St Anthony's Park is approximately 131m south east of the proposed Pylon LD120. The construction and decommissioning noise effects of the Proposed Development are assessed as having a **minor adverse** significance of effect at the St Anthony's Park. Although this new receptor was not considered in the ES, it is considered that the significance of effect of the alignment originally assessed in the ES would also be **minor adverse** during construction and there would be no change to the assessment presented in the ES.
- 7.2.2 Works will be undertaken in accordance with the Noise and Statutory Nuisance Act 1992 and in accordance with BS5228-1. A range of mitigation measures are set out at paragraph 14.6.1 of the ES (**Volume 5.14.1, section 14.6**) and monitoring of noise during construction will be undertaken in accordance with the Draft CEMP (**Volume 5.26.1**).

### 7.3 Prediction and Assessment of Significance of the Potential Operational Noise Effects

- 7.3.1 Due to existing high background noise levels within the area of St Anthony's Park, the operational noise associated with the Proposed Development was scoped out of further assessment in the ES. The proposed realignment does not alter the existing background noise and would not affect the assessment set out within the ES (**Volume 5.14**) in relation to operational noise.

## 8 ARBORICULTURAL IMPACT ASSESSMENT

- 8.1.1 This chapter should be read in conjunction with the Arboricultural Impact Assessment (AIA)(**Volume 5.21** of the ES). The updated tree loss plans are provided at **Volume 4.7.8B Trees and Hedges to be Removed or Affected Plans Section G- Avonmouth**.
- 8.1.2 The proposed realignment would remove the requirement, set out in the ES (**Volume 5.21**), to prune three trees (T306, T309 and T317). In addition, 28m of hawthorn hedgerow (H96), which was previously identified for removal and replacement in-situ in the ES (**Volume 5.21**), would no longer require removal due to the relocation of the pylon and associated working area.
- 8.1.3 The realignment would result in a minor change to the tree losses described in the ES (**Volume 5.21**). There would be permanent loss of approximately 250m<sup>2</sup> of one tree group (G46) that was subject to partial felling and replacement in situ under the alignment assessed in the ES. The realignment also would result in the loss of 3,000m<sup>2</sup> of tree group G44, an increase of around 1,750m<sup>2</sup> from that assessed in the ES. National Grid is committed to planting four trees for each tree lost to the Proposed Development; the losses due to the realignment are already sufficiently offset through the proposals outlined in the ES. The proposed realignment does not materially change the assessment contained within the ES (**Volume 5.21**).

## 9 SUMMARY

- 9.1.1 Following discussions between National Grid and Wessex Water since submission of the DCO application, a minor realignment of the Proposed Development is proposed at the Wessex Water Sewage Treatment Works site, Kings Weston Lane, Avonmouth.
- 9.1.2 The realignment in this location is to alter the 400kV overhead line alignment in order to avoid the permitted development recently extended at the existing Sewage Treatment Works site.
- 9.1.3 The proposed realignment is located within the Order Limits however the proposed realignment falls outside the 400kv overhead line LoD identified at **Volume 5.3.3, Figure 3.1.18** as described in the ES.
- 9.1.4 In the light of the proposed realignment the assessments reported in the ES have been reviewed to ensure any potential effects of the Proposed Development have been identified and assessed.
- 9.1.5 The proposed realignment does not change any of the findings of the ES and the conclusions remain as stated in the submitted ES documents (**Volume 5.1 – 5.29**).