

# SILVERTOWN TUNNEL

Volume 8

## Development Consent Order Application

Response to ExA's First Written Questions:

8.6 Principal Issue: Terrestrial Ecology

The Infrastructure Planning (Examination Procedure)

Rules 2010

November 2016

Silvertown Tunnel

Response to ExA's First Written Questions:

Terrestrial Ecology

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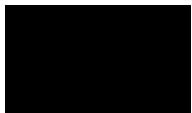
## Silvertown Tunnel

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# Development Consent Order Application Response to ExA's First Written Questions: Terrestrial Ecology

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Silvertown Tunnel

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## TE TERRESTRIAL ECOLOGY

### TE.1 Question

**(a) The Biodiversity Action Plan and Mitigation Strategy (BAPMS) [APP-065] states that compliance with this document would be secured by the design principles for the landscaping proposals, which in turn are secured by the dDCO Requirement 6. Should this document be secured directly by a Requirement in the dDCO as ecological matters are not always directly related to landscape matters?**

**(b) Has a draft landscaping scheme been prepared and submitted to the Examination? If not, why not?**

**(c) How does the BAPMS differ from the Ecology Management Plan which is to be “prepared in consultation with Natural England” pursuant to Requirement 5(2)(h), as currently worded in the dDCO?**

### Response

TE.1.1 (a) ES paragraph 9.5.19 [APP-031] states that, with regards to ecology, “Residual significant effects will be mitigated within the Order Limits or offset within the wider area as set out in Section 9.6 and according to the principles set out in Appendix 9.H: Biodiversity Action Plan and Mitigation Strategy [APP-065]”. The measures of the BAPMS are secured by Design Principles LSCP.11; SUEN.02; SUEN.03; and SUEN.04 (Pages 21 and 28) [APP-096], which relate to landscaping design, tree planting, the provision of green infrastructure and habitat offsetting. Compliance with these principles is secured by requirement 3 (detailed design) of the dDCO. However, to bring clarity on the face of the Order the applicant has added a new requirement to the dDCO which directly secures the implementation of the BAPMS.

TE.1.2 (b) A draft landscaping scheme has not been submitted to the Examining Authority. A concept illustrative design has been provided within the Design and Access Statement [APP-095], which has informed the assessment presented in the ES Chapter 9 Terrestrial Ecology [APP-031]. The illustrative design indicates one way that the relevant design principles can be applied. The Design Principles [APP-096], secured by the dDCO through requirement 3 in Schedule 2 to the dDCO, will guide the detailed landscaping arrangements to be developed in line with the

BAPMS and submitted to the relevant planning authority for approval under requirement 6, when the contractor has been appointed.

- TE.1.3 (c) The requirement to provide an Ecological Management Plan is set out in the Code of Construction Practice (CoCP) [APP-092]. It will detail the mitigation for ecology during the construction phase, including measures such as black redstart monitoring and the requirement for an ecologist to be on site during clearance. The BAPMS [APP-065] secures the operational mitigation by ensuring that the detailed landscape design maximises the biodiversity potential of the on-site habitats and the offsetting to ensure net gain.

## **TE.2 Question**

**The wording in the BAPMS, such as in 5.3.1 is often non-committal – for example;**

**“If there are opportunities for pond creation, areas of standing water should be sculpted to provide zones of differing depths of water.”**

**This type of wording in a mitigation strategy gives little comfort that such mitigation would be delivered. The next paragraph also gives no commitment to deliver the pond management that is suggested and 5.4.11 gives no commitment to setting up bird boxes.**

**Please can the Applicant review this document thoroughly and ensure that there is certainty that the mitigation would be delivered? The ExA would also like to see such mitigation included in the mitigation road map, indicating where this is to be secured through the dDCO.**

## **Response**

- TE.2.1 The implementation of the mitigation strategy set out in the BAPMS is secured via the Design Principles document [APP-096]. Compliance with the Design Principles document is secured by requirement 3 of the dDCO. Design principles LSCP.11; SUEN.02; and SUEN.04 (pages 21 and 28) require the Scheme (including landscaping, planting and habitat offsetting) to be designed in accordance with the measures set out in the BAPMS. In addition, a new requirement has been added to the dDCO which directly secures the implementation of the BAPMS (see response to TE1).
- TE.2.2 The Design Principles and the BAPMS, however, can only ensure that this mitigation forms part of the detailed design, and the principles by which the mitigation should be designed. It is only after the detailed design process is complete that the exact specification can be confirmed. The BAPMS therefore provides the specific measures; as well as the higher level suggestions, principles and parameters, that must be taken into account when developing the detailed design. The examples below illustrate this.
- TE.2.3 Thus, in terms of pond creation, it is not certain that there would be opportunities for it to take place until after detailed design, however the BAPMS creates a principle by which such ponds would be designed and built out where such opportunities exist. Furthermore, pond creation is not



identified as a specific mitigation measure in the ES required to address a particular scheme impact, but instead is one potential way that must be considered in which the general mitigation measure of replacing habitat could be delivered.

- TE.2.4 In contrast, paragraph 5.4.11 states that bird boxes should be placed on roofs of suitable buildings. As this is a definitive statement, the detailed design of the Scheme will therefore need to include placing these boxes on any suitable building.
- TE.2.5 The Applicant therefore does not propose to amend the BAPMS.
- TE.2.6 The updated Mitigation Route Map submitted at deadline 1 identifies where the measures in the BAPMS are secured in the dDCO.

## TE.3 Question

**APP-065 at paragraph 6.1.4 and table 6.3 references broadleaved plantation woodland and other habitat that is to be created outside the Order limits.**

**How will this planting be secured through the dDCO?**

## Response

- TE.3.1 ES paragraph 9.5.19 [APP-031], as well as others, state that with regards to ecology, "Residual significant effects will be mitigated within the Order Limits or offset within the wider area as set out in Section 9.6 and according to the principles set out in Appendix 9.H: Biodiversity Action Plan and Mitigation Strategy [APP-065]". The requirements of the BAP are currently secured by Design Principles – LSCP.11; SUEN.02; SUEN.03; and SUEN.04 (pages 21 and 28) [APP-096], which are secured by requirement 3 of the dDCO.
- TE.3.2 Furthermore as stated in ES paragraph 9.5.23 [APP-031], "The quantum of habitat required and the design principles for these measures, which will include planting palettes and the identification of the Design Review Panel and stakeholders who will be involved in their implementation is set out in the BAPMS [APP-065]."
- TE.3.3 There is a very small amount of woodland on the Site, 4912m<sup>2</sup> of small pockets of fragmented broadleaved plantation woodland in total. Of this, 1808m<sup>2</sup> will be permanently lost as a result of the Scheme. however there is likely to be some re-provision of woodland within the landscape design. The remainder of the woodland areas may be temporarily lost due to construction. Paragraph 7.1.6 of the Code of Construction Practice [APP-092] requires habitat, including trees, be retained and protected where possible. Where this is not possible, paragraph 7.1.6 continues by stating that "areas of temporary land occupation will be returned to their previous state, condition and owner following completion of construction".
- TE.3.4 The total net deficit of semi-natural habitat will be in Greenwich, whereas Silvertown will have a net gain in semi-natural habitats. In the absence of detailed landscape designs, the BAPMS [APP-065] provides for the offsetting of the net loss of semi-natural habitat by allocating a monetary value on a worst case scenario of permanent habitat loss basis. This monetary value will be finalised at detailed design, as set out in paragraph 6.2.1 of the BAPMS.

- TE.3.5 Compliance with this is secured by Design Principle SUEN.04, which sets out that 'All habitats that cannot be replaced on site should be offset to ensure there is an overall net gain in biodiversity. The loss has been monetised through Natural Capital Valuation and should be provided offsite in accordance with the Scheme specific BAP in the Environmental Statement appendices'.
- TE.3.6 This is then secured in the dDCO [APP-013] as the Applicant is required to comply with the design principles as a result of paragraph 3(1) of Part 1 of Schedule 2 to the dDCO. In addition, a new DCO requirement has been added at deadline 1 that directly secures the implementation of the BAPMS.

## **TE.4 Question**

**(a)The arboricultural survey (ES Appendix 9.D) [APP-061] recommends in paragraph 5.1.1 that an arboricultural impact assessment is prepared when the proposed layout is finalised, with the assessment including a schedule of trees to be retained and removed.**

**How is this to be secured in the dDCO?**

**Are the LPAs content with this approach?**

**(b)The ExA requests that the Applicant provide further information, so that the impact on trees can be better understood and taken into account by the ExA in making their recommendation. The ExA understands that final details are not yet available, but requests that this information is based on current knowledge and on a “worst case scenario”.**

**(c) ES tables 9-10 and 9-11 identify the number of individual trees that would be lost from both sides of the river Thames. Are the trees that would be lost identified on a map in the ES? If not, please could the Applicant provide a plan that shows this information?**

## **Response**

TE.4.1 (a) The Code of Construction Practice [APP-092] states that an Ecological Management Plan will be developed and implemented by the Contractor. This plan will detail measures to manage the risk of adversely affecting flora and fauna on and within the vicinity of the worksites. The Code of Construction Practice is secured by Requirement 5 in the dDCO [APP – 013]. The revised CoCP submitted at Deadline 1, states that an arboricultural impact assessment is to be included as part of the Ecological Management Plan. Compliance with the CoCP is secured by requirement 5 of the dDCO.

TE.4.2 In ES Chapter 9: Terrestrial Ecology [APP-031] Table 9-10 and 9-11 state that there are 15 trees in the northern worksite parcel and 96 trees in the southern worksite parcel that are within the areas of temporary habitat loss due to construction. Appendix 9.D: Arboricultural Survey Report [APP-061] and Appendix 9.E: Arboricultural Impact Assessment [APP-062] also provide further details regarding trees. Section 3.2 of Appendix 9.E [APP-062] details individual and grouped tree removals; Table 3-1

provides individual tree information, Table 3.2 details a group of trees that will be partially removed. The groups of trees correlate with the broadleaved plantation woodlands on Drawing 9.3 Phase 1 Habitat Survey [APP-037]. Due to the fact that it is not known exactly what trees will be lost or saved during construction, it was assumed as a worst case that all the trees will be removed in the ES. However, trees will be protected where possible using the detailed Arboricultural Impact Assessment [APP-062] to produce a Tree Protection Plan or if they are to be removed they will be replaced upon completion of the Scheme. Paragraph 7.1.6 of the COCP [APP-092] states that "*All habitat, including trees, will be retained and protected where possible. Areas of temporary land occupation will be returned to their previous state, condition and owner following completion of construction*".

- TE.4.3 Table 6-1 of the BAPMS [APP-065] details the area to be permanently lost including woodland and scattered trees and in paragraph 6.1.3 of the BAPMS [APP-065], the calculations for a worst case scenario "*the most valuable habitats to be permanently lost was applied to the total area of residual habitat loss for Greenwich to generate an overall 'worst case' compensation value. That is 1,808m<sup>2</sup> of broadleaved plantation woodland, 1,103m<sup>2</sup> of standing water and 3,434m<sup>2</sup> of dense scrub was applied to the total area of residual habitat loss (6,345m<sup>2</sup>) in Greenwich to generate an overall 'worst case' compensation value (£41,036)*." Drawings 9.4 [APP-037] show the Phase 1 habitat survey maps with an overlay of scheme footprint on baseline (including woodland and scattered trees). Whilst this drawing does not identify individual trees that will be lost, it reflects the worst case assumptions that have been used for the assessment.
- TE.4.4 Parameters for delivering operational mitigation, including replacement habitats such as trees, shrubs, brownfield habitat, species-rich grasslands and water bodies, is presented within the Scheme-specific BAP (Appendix 9.H: BAPMS [APP-065]. The quantum of habitat required and the design principles for these measures, which will include planting palettes and the identification of the Design Review Panel and stakeholders who will be involved in their implementation is set out in the BAP [APP-065].

## TE.5 Question

**Where in the ES is there a location plan and description of the areas of plantation broadleaved woodland that would be lost?**

**If the ES does not currently contain such information, the Applicant is request to provide such information.**

## Response

- TE.5.1 Paragraph 9.4.13 to 9.4.15 in the ES (APP-031) discusses the broadleaved plantation woodland on the Site, and Table 3-1 and Table 3-2 within Appendix 9A Phase 1 Habitat Report (APP-058) further describes the small areas of plantation broadleaved woodland in Silvertown and the plantation broadleaved woodland in Greenwich respectively.
- TE.5.2 Drawing 9.4 (sheets 1 and 2) (APP-037) shows the Phase 1 habitat survey maps with an overlay of the Scheme's permanent and temporary land-take, including plantation broadleaved woodland and scattered trees. There is a very small amount of plantation broadleaved woodland within the Order Limits, located in small pockets of fragmented habitat totalling 4,912m<sup>2</sup> (this includes the woodland within both the permanent and temporary footprint).
- TE.5.3 Of this total, 1808m<sup>2</sup> lies within the permanent footprint of the Scheme and will all be permanently lost as a result of the Scheme, as it is within the permanent footprint. However re-provision of woodland within the permanent footprint of the scheme as part of the detailed design forms part of the Biodiversity Action Plan and Mitigation Strategy (APP-065) secured through the Design Principles and the new requirement securing compliance with this document added to the updated dDCO submitted at Deadline 1. Furthermore, the landscaping scheme to be submitted pursuant to Requirement 6 will include details of existing trees to be retained with measures for their protection during construction (Requirement (6)(2)(e) of the dDCO).
- TE.5.4 For trees within the temporary construction footprint, paragraph 7.1.6 of the CoCP (updated and submitted at deadline 1), requires the Contractor to retain and protect all habitat, including trees, where possible. However it also states that land temporarily required for construction, would be returned to its '*previous state, condition and owner following completion of construction*'. Thus, the existing plantation broadleaved woodland areas

would be restored to its previous state and condition prior to the Contractor giving up possession of the land.

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## **TE.6 Question not for the Applicant**



## **TE.7 Question not for the Applicant**

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## **TE.8 Question not for the Applicant**

**TE.9 Question not for the Applicant**

## **TE.10 Question**

**How would the updated Phase 1 habitat surveys and targeted species surveys proposed in the ES [APP-031] at paragraph 9.5.7 be secured in the dDCO?**

**In the event that construction does not commence within 2 years of the latest round of ecological surveys, how does the Applicant intend to update such information to ensure it reflects the current situation?**

## **Response**

- TE.10.1 Paragraph 7.1.2 of the revised CoCP (submitted at deadline 1) states that a pre-construction survey (including a Phase 1 habitat survey and any further targeted surveys) will be undertaken a maximum of two years prior to commencement of construction works. The CoCP is secured by requirement 5 (1) of the dDCO [APP-013]. Furthermore requirement 5 (2)(h) ensures an Ecology Management Plan is prepared in consultation with Natural England and approved by the relevant planning authority prior to commencement of the relevant part of the authorised development. As set out in paragraph 7.1.2 of the revised CoCP submitted at Deadline 1, the Ecology Management Plan must take into account the results of these pre-construction surveys.
- TE.10.2 As stated in ES paragraph 9.5.7 [APP-031], should development commence later than two years after the current 2015 updated surveys, then a pre-construction survey will be undertaken to update the potential ecological constraints, as set out in paragraph 7.1.2 of the CoCP. This includes a requirement for an extended Phase 1 habitat survey followed by targeted surveys for protected species that may be using the Site. This will prevent impacts on mobile species in the unlikely event that new species move into the area.

## **TE.11 Question not for the Applicant**

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## **TE.12 Question not for the Applicant**

## **TE.13 Question**

**Has the Applicant discussed the need for protected species licences with NE? If so, can the Applicant provide an agreed list of any that are required.**

**Can NE confirm, in relation to each licence required, whether there is any known impediment to the issue of such licences?**

### **Response**

- TE.13.1 There are no requirements for terrestrial protected species licences based on existing information provided within the ES.
- TE.13.2 Discussions between the Applicant and Natural England are ongoing regarding the requirement for any licences required for marine protected species (refer to the Statement of Common Ground between the Applicant and Natural England submitted at Deadline 1).