



The Sizewell C Project

6.14 Environmental Statement Addendum Volume 1: Environmental Statement Addendum Chapters Chapter 4 Southern Park and Ride

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4 SOUTHERN PARK AND RIDE

4.1 Introduction

4.1.1 This chapter of the **ES Addendum** provides an update to **Volume 4** of the **ES** (Doc Ref. 6.5) [APP-378 to APP-408]. The chapter presents the Additional Information prepared and the proposed changes to the proposed development at the southern park and ride site since the submission of the Application in May 2020.

4.1.2 The Additional Information of relevance to **Volume 4** of the **ES** (Doc Ref. 6.5) [APP-378 to APP-408] includes:

- refinements to the air quality modelling to account for new information published by Defra and refined strategic traffic modelling (refer to the **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad) for further information); and
- updated ecological baseline information submitted in December 2020 (Doc Ref. 6.13(A)) [[AS-036](#)].

4.1.3 The proposed changes of relevance to **Volume 4** of the **ES** (Doc Ref. 6.5) [APP-378 to APP-408] comprise the extension of a landscape bund and other minor changes at the southern park and ride, including a minor reduction of the site boundary (and thereby the Order Limits) (**Change 10**). These are further described in **section 4.2** below.

4.1.4 Furthermore, the revised assessment for air quality has considered the proposed changes to the Heavy Goods Vehicles (HGV) movements, associated with **Change 1** (potential to increase in the frequency of freight train movements to facilitate bulk material imports by rail) and **Change 2** (an enhancement of the permanent beach landing facility and construction of a new, temporary beach landing facility) described further in **Chapter 2** of this **ES Addendum**. The revised transport and noise and vibration assessments, including the assessment of impacts on the roads near Wickham Market are presented in **Chapter 2** of this **ES Addendum**, in line with the structure of the **ES**.

4.1.5 A review of any Additional Information and the proposed changes has been undertaken by EIA specialists across all technical assessments presented in **Volume 4** of the **ES** (Doc Ref. 6.5) [APP-384 to APP-408].

4.1.6 Updates to the assessments of noise and vibration, air quality, landscape and visual, terrestrial ecology and ornithology, amenity and recreation and terrestrial historic environment presented in **Chapters 4 to 9** of **Volume 4** of the **ES** (Doc Ref. 6.5) [APP-384 to APP-401] are considered within **sections 4.3 to 4.8** of this chapter.

- 4.1.7 The Additional Information and proposed changes are considered to not affect the technical assessments presented in **Volume 4** of the **ES: Chapter 10 Soils and Agriculture** [APP-402 to APP-404], **Chapter 11 Geology and Land Quality** [APP-405 and APP-406], and **Chapter 12 Groundwater and Surface Water** [APP-407 and APP-408] (Doc Ref. 6.5).
- 4.2 **Update to the description of development**
- 4.2.1 This section presents details on the proposed changes made to the proposed development at the southern park and ride site since the preparation of the Application.
- 4.2.2 The proposed change to the southern park and ride site comprises an extension of landscaped bund, other minor changes at the southern park and ride, including a minor reduction of the site boundary (and thereby the Order Limits) (**Change 10**). An updated version of **Volume 4, Chapter 2** of the **ES** (Doc Ref. 6.5) [[APP-380](#)] in tracked changes, to include these changes, is provided within **Volume 3, Appendix 4.2.A** of this **ES Addendum**. The revised site boundary for the southern park and ride is shown in **Volume 2, Figure 4.2.1** of this **ES Addendum**.
- 4.2.3 The Additional Information submitted for the southern park and ride does not alter the design or construction assumptions presented in the **Volume 3, Chapter 2** of the **ES**.
- a) **Extension of landscape bund**
- a) i) **Proposed development in the Application**
- 4.2.4 As detailed in the description of the southern park and ride provided in **Volume 4, Chapter 2** of the **ES** (Doc Ref. 6.5) [[APP-380](#)], the southern park and ride at Wickham Market would be screened by two landscape bunds. The larger of the two bunds would run along the south-east, east and north-east boundaries, and half of the north-west boundary. Additionally, a buffer distance of 10m is proposed between the site boundary and the landscape bund to the east of the site, and there would be 10m buffers to the west where the site is adjacent to woodland blocks. Within these 10m buffer zones, no construction or permanent development would take place.

4.2.5 The landscape bund would be 3m high around the Traffic Incident Management Area (TIMA) at the north-east section of the site. The landscape bund would screen the TIMA to the north-west, north-east and south-east boundaries of the site. The purpose of the landscape bund is to aid the visual and acoustic screening of the southern park and ride from the adjacent landscape and habitats.

4.2.6 In the Application, the arm of the landscape bund to the north-west of the site runs for only half the length of this boundary, forming a screen around the TIMA itself but not alongside the access to the TIMA.

a) ii) Description of the proposed change

4.2.7 The landscape bund adjacent to the north-west boundary is now proposed to be extended to run almost the full length of the adjacent boundary, stopping short of the 10m buffer zone to the south-west. The landscape bund would be 3m high for this additional length. The proposed change would ensure that the bund runs alongside the access to and from the TIMA.

4.2.8 The area is already well screened from views to the west. However, the extension of the landscape bund would provide some additional screening to views from the B1116 and a nearby footpath. **Volume 2, Figure 4.2.2** of the **ES Addendum** shows the updated masterplan with the proposed extension to the bund, with the following **ES Addendum, Volume 2** figures also updated:

- **Figure 4.2.3** – Illustrative Drainage Plan for the Southern Park and Ride at Wickham Market; and
- **Figure 4.2.4** – Illustrative Lighting Plan for the Southern Park and Ride at Wickham Market; and
- **Figure 4.2.5** – Parameter Plan for the Southern Park and Ride at Wickham Market.

4.2.9 The existing drainage plan for the site in the Application shows a ditch around the base of the bund. This would be lengthened to extend around the full base of the bund and its maintenance would be factored into the drainage strategy of the site. The landscape bund extension is not envisaged to result in a detrimental effect on drainage as it would increase surface water storage on site.

- 4.2.10 Badger fencing is proposed to be installed around the base of each landscape bund to prevent badgers establishing setts within the site boundary and so minimising constraints during removal and reinstatement. The badger fencing around the landscape bund would also be lengthened to extend around the full length of the bund.

a) iii) Why is this change proposed?

- 4.2.11 SZC Co. reviewed the length of the bund following consultation feedback from local residents and the local Member of the Parliament (MP).
- 4.2.12 The layout of the site, including the positioning of the bunds, was designed to maximise the benefit of existing screening provided by Whin Belt and the other blocks of woodland to the north, west and east of the site and to maintain a cut-and-fill equilibrium.
- 4.2.13 A review of cut-and-fill balance at the associated development sites since the submission of the Application indicate that there would be sufficient material to enable the proposed bund to extend along the full length of the north-west boundary.
- 4.2.14 The bund in this area is proposed to screen the proposed TIMA. The TIMA would only be used in the event of disruption on the local highway network or at the main development site, in which case HGVs travelling towards the main development site would be diverted to wait in the holding area, until such time as the disruption has cleared.
- 4.2.15 However, given there would be a surplus of cut-and-fill material, it was considered that lengthening the bund would be a good use of the excess material, whilst also providing additional screening to address the concerns of the local community.

b) Minor layout changes

b) i) Proposed development in the Application

- 4.2.16 Planting is proposed between the security fence and the existing Public Right of Way (PRoW) adjacent to the western boundary, north of the landscape bund and east of Whin Belt. The design of the internal road layout in the Application creates a pinch point at this location, making it difficult to accommodate the proposed planting.

b) ii) Description of the proposed change

- 4.2.17 The internal road layout has been amended, moving the bend further into the site slightly, to allow for more space between the road and the western site boundary. This would allow for sufficient space between the PRoW and the security fence for the proposed planting.

b) iii) Why is this change proposed?

- 4.2.18 This minor design change has been made to ensure there is sufficient space for the proposed planting to grow between the PRoW and the proposed security fence.

c) Retention of private access

c) i) Proposed development in the Application

- 4.2.19 An existing private access connecting the site of the southern park and ride to the adjacent field to the north-east was previously not included in the Application. However, following further engagement with the landowner, SZC Co. has committed to retaining the existing access, which follows the track along the south-east boundary before diverting north alongside the eastern boundaries of the site to the north-east field. The existing route alongside the boundary is not a hard-surfaced track but rather an informal route adjacent to the site boundary.

c) ii) Description of the proposed change

- 4.2.20 The private access to be retained would run alongside the site boundary within the buffer zone on the east side of the landscape bund, as shown on **Volume 2, Figure 4.2.2** of the **ES Addendum**. The gap between the security fence and the site boundary around the east side of the site where the access would run is approximately 6.5m wide.
- 4.2.21 The retention of the private access within the buffer zone on the eastern side of the site would not have an effect in environmental terms for the following reasons:
- The landowner already uses this route to access the adjacent field.
 - The buffer zone is intended to reduce impacts from the southern park and ride on the adjacent land, including the boundary hedgerow. There would be no work activities within the buffer zone and no above ground buildings or structures associated with the retained private access.

- The retained access would remain an informal route between the landscape bund and the eastern boundary. It is not proposed to formalise the route or provide any hard surfacing.

4.2.22 There would be no change to the landscape bund, ecological or security fencing or the retained hedgerow as a result of the retention of the private access. It has been included on the updated plans for completeness.

c) iii) Why is this change proposed?

4.2.23 The retention of a private access to the adjacent field has been included for completeness and to reflect engagement with the landowner to retain the access.

d) Reduction to the site boundary

d) i) Proposed development in the Application

4.2.24 The southern park and ride site included a thin strip of land to the south of the A12 in the Application.

d) ii) Description of the proposed change

4.2.25 It is proposed to remove this strip of land from the site boundary of the southern park and ride. The area of land to be removed measures approximately 0.3 ha. The resultant site area for the southern park and ride would therefore be 26.4 ha. The areas of reduction are shown on **Volume 2, Figure 4.2.1** of the **ES Addendum**.

d) iii) Why is this change proposed?

4.2.26 It has been determined following engagement with landowners and review of the development proposals that the thin strip of land to the south of the A12 is not necessary for the construction, operation or removal and reinstatement phases of the southern park and ride. It is therefore proposed to be removed from the site boundary.

4.3 Noise and vibration

a) Introduction

4.3.1 This section provides an addendum to noise and vibration assessment at the southern park and ride site with reference to the following documents submitted with the Application:

- **Volume 4, Chapter 4** of the **ES** (Doc Ref. 6.8) [[APP-384](#)].

4.3.2 This section presents an assessment of the potential noise and vibration effects from the proposed changes described in **section 4.2**.

4.3.3 As set out in **section 4.1**, the revised transport and noise and vibration assessments associated with **Change 1** and **Change 2**, including the assessment of impacts on the roads near Wickham Market are presented in **Chapter 2** of this **ES Addendum**, in line with the structure of the **ES**.

b) Relevant design changes

4.3.4 The extension of the landscape bund adjacent to the north-west boundary (which forms part of **Change 10**) is of relevance to the noise and vibration assessment of the southern park and ride site.

4.3.5 The minor changes to the layout, the retention of the private access, and the revisions to the site boundary would not change the assessment of noise and vibration effects, since the closest noise sensitive receptor to the north west is more than 500m from the edge of the bund and noise levels here from the site would be negligible with no bund in place. The changes would result in a very small decrease in noise from the site at this receptor and therefore, the noise and vibration effects have not been considered further.

c) Updated assessment – Extension of landscape bund, other minor changes at the southern park and ride, including a minor reduction of the Order Limits (Change 10)

4.3.6 The noise level reduction provided by the extended landscape bund does not change the effects on any nearby noise sensitive receptor, as none of the noise-sensitive receptors are located adjacent to the north and north-west boundary of the site.

4.3.7 Therefore, there is no change to the conclusions of the assessment presented within **Volume 4, Chapter 4** of the **ES** (Doc Ref. 6.5) [[APP-384](#)].

4.4 Air quality

a) Introduction

4.4.1 This section provides an addendum to the air quality assessment at the southern park and ride site with reference to the following documents submitted with the Application:

- **Volume 4, Chapter 5** of the **ES** (Doc Ref. 6.5) [[APP-387](#)]; and
- **Volume 4, Chapter 5** of the **ES** Air Quality **Figure 5.1** (Doc Ref. 6.5) [[APP-389](#)].

4.4.2 This section presents Additional Information that has been gathered since the Application was made, and an assessment of the potential air quality effects from the reduction in HGV movements as a result of the potential to increase rail movements (**Change 1**) and the proposed enhancement of the permanent BLF and additional temporary BLF (**Change 2**).

4.4.3 The air quality assessment presented within this section considers the air quality impacts from assessment using the Additional Information presented below, and the air quality impacts associated with the relevant design changes.

4.4.4 This section is supported by the following appendices provided in **Volume 3** of this **ES Addendum**:

- **Volume 3, Appendix 4.4.A**, which presents the modelled air quality current and future year baselines in the air quality assessment; and
- **Volume 3, Appendix 2.7.C**, which presents the updated transport emissions assessment using the additional information and the assessment of transport emissions associated with the proposed design changes.

b) Relevant Additional Information

4.4.5 Additional Information is presented in this chapter on further air quality transport emissions modelling that has been undertaken to include the following:

- Refined traffic representative estimates of the 24-hour Annual Average Daily Traffic (AADT) (refer to **Transport Assessment Addendum** for further information (Doc Ref. 8.5(A) Ad));
- Emissions Factors Toolkit (EFT) version 10.1 (Ref. 1);

- Defra's projected 2018-based Background Pollutant Concentration Maps (Ref.2); and
- NO_x to NO₂ conversion tool v8.1 (Ref. 3).

c) Relevant changes

4.4.6 Relevant changes for the assessment of effects on air quality at the southern park and ride include the reduced HGV movements during construction of Sizewell C with the proposed changes to increase rail movements (**Change 1**) and the enhancement of the permanent BLF and additional temporary BLF (**Change 2**), as described within **Chapter 2** of the **ES Addendum**.

4.4.7 The extension of the landscape bund along the north-west boundary does not change the assessment of effects on air quality as the distance to the two nearest receptors, WM13 and WM14, is still greater than 500m from the extended bund. The risk of dust soiling and human health would remain low, and with embedded mitigation measures in place, as set out within the **Code of Construction Practice** (Doc Ref. 8.11(A)), the resulting dust effects would remain **not significant**. The minor changes to the layout, the retention of the private access on the eastern site boundary, and the revisions to the site boundary would also not change the assessment of effects on air quality and, therefore, have not been considered further.

d) Updated assessment – Additional Information

4.4.8 The traffic data for the Sizewell C Project has been updated due to the refinements to the strategic traffic model as detailed in the **Transport Assessment Addendum** (Doc Ref. 8.5(A) Ad).

4.4.9 The refined traffic flows result in a change in modelled pollutant concentrations at receptors within the study area of the southern park and ride site, from the results presented in **Volume 4, Chapter 5** of the **ES** (Doc Ref. 6.5) [APP-387]. Furthermore, Defra have since published the updated EFT version 10.1 (Ref. 1), updated background pollutant concentration maps (Ref. 2), and an updated version of the NO_x to NO₂ conversion tool v8.1 (Ref. 3). Therefore, a revised air quality assessment of traffic emissions has been undertaken with the full results presented within **Volume 3, Appendix 2.7.C** of this **ES Addendum**. A summary of these results within the study area of the southern park and ride site is included within this section.

- 4.4.10 The Additional Information does not change the legislation, policy and guidance, or the methodology or other assessments for air quality, as described in **Volume 4, Chapter 5** of the **ES** (Doc Ref. 6.5) [APP-387], with the exception of the updates made to the transport emissions modelling to take into account the latest Defra EFT version 10.1 (Ref. 1) and the NO_x to NO₂ conversion tool v8.1 (Ref. 3).

d) i) Baseline

- 4.4.11 This section presents a description of the updated baseline environment characteristics within the site and the surrounding area. The site and receptors in the study area are presented in **Figure 5.1** of **Volume 4** in the **ES** (Doc Ref. 6.5) [APP-389].

d) i) a) Current baseline

- 4.4.12 NO₂ and particulate matter (PM₁₀ and PM_{2.5}) 2018 background concentrations within the site are projected to be between 8.0 and 8.6µg/m³ for NO₂, between 15.5 and 16.5µg/m³ for PM₁₀ and between 9.5 and 9.6µg/m³ for PM_{2.5}, according to the recently published Defra Background Concentration Maps (Ref. 2). The backgrounds for the current baseline are broadly in line with the background values set out within **Volume 4, Chapter 5** of the **ES** (Doc Ref. 6.5) [APP-387].

- 4.4.13 The overall predicted baseline concentrations, including nearby road traffic contributions range from 9.3 to 11.1µg/m³ for NO₂, 15.5 to 15.8µg/m³ for PM₁₀, and 9.4 to 9.7µg/m³ for PM_{2.5} at sensitive receptors near the site. These values are broadly in line with the baseline assessment presented within **Volume 4, Chapter 5** of the **ES** (Doc Ref. 6.5) [APP-387], albeit the updated baseline NO₂ values are slightly reduced (by up to 1.4µg/m³), PM₁₀ values are slightly increased (by up to 0.3 µg/m³), and PM_{2.5} are the same or increased or reduced by 0.1 µg/m³. Further details on the modelled 2018 baseline pollutant concentrations at receptors can be found in **Volume 3, Appendix 4.4.A** and **Volume 3, Appendix 2.7.C** of the **ES Addendum**.

d) i) b) Future Baseline

- 4.4.14 NO₂, PM₁₀, and PM_{2.5} 2023 background concentrations within the site are projected to be between 6.7 and 8.8µg/m³ for NO₂, between 14.4 and 15.4µg/m³ for PM₁₀, and between 8.6 and 8.8µg/m³ for PM_{2.5}, a reduction in all three pollutants from the current baseline according to the recently published Defra Background Concentration Maps (Ref. 2).

4.4.15 NO₂, PM₁₀, and PM_{2.5} 2028 background concentrations within the site are projected to be between 5.9 and 6.2 µg/m³ for NO₂, between 14.1 and 15.1 µg/m³ for PM₁₀ and between 8.3 and 8.5 µg/m³ for PM_{2.5}, an reduction in all three pollutants from the current baseline (Ref. 2).

4.4.16 The backgrounds for the future baseline are broadly in line with the background values set out within **Volume 4, Chapter 5** of the **ES** (Doc Ref. 6.5) [APP-387]. The future baseline pollutant concentrations at nearby sensitive receptors in 2023 range from 6.5 to 8.8 µg/m³ for NO₂, 14.5 to 14.8 µg/m³ for PM₁₀, and 8.5 to 8.8 µg/m³ for PM_{2.5}. The future baseline pollutant concentrations at nearby receptors in 2028 range from 5.7 to 7.1 µg/m³ for NO₂, 14.1 to 14.4 µg/m³ for PM₁₀, 8.3 to 8.5 µg/m³ for PM_{2.5}. These values are broadly in line with the baseline assessment presented within **Volume 4, Chapter 5** of the **ES** (Doc Ref. 6.5) [APP-387], albeit the updated baseline NO₂ values are slightly reduced (by up to 1.4 µg/m³), PM₁₀ values are the same or slightly increased (by up to 0.1 µg/m³), and PM_{2.5} are slightly reduced (by up to 0.3 µg/m³). Further details of modelled pollutant concentrations for the years 2023 and 2028 can be found in **Volume 3, Appendix 4.4.A** and **Volume 3, Appendix 2.7.C** of the **ES Addendum**.

d) ii) Assessment

4.4.17 Details on modelled pollutant concentrations for the year 2023 (assumed peak year of construction of the southern park and ride) and 2028 (assumed peak year of operation of the southern park and ride) can be found in **Volume 3, Appendix 2.7.C** of the **ES Addendum**.

4.4.18 The updated modelling using the additional information (detailed in **section 4.4 b**) does not change the overall assessment of effects on air quality resulting from construction traffic related to the Sizewell C Project for either of the assessment years. The magnitude of change in NO₂, PM₁₀, and PM_{2.5} concentrations would remain imperceptible across all modelled receptors and scenarios, resulting in a negligible effect which is **not significant**, as described in **Volume 4, Chapter 5** of the **ES** (Doc Ref. 6.5) [APP-387]. No further mitigation is required.

e) Updated assessment – reduction in HGV movements (Changes 1 and 2)

4.4.19 The updated modelling of transport emissions with the reduced HGV movements associated with the proposed changes to increase rail movements (**Change 1**) and the additional temporary BLF (**Change 2**) is presented in **Volume 3, Appendix 2.7.C** to this **ES Addendum**.

- 4.4.20 The proposed changes do not affect the existing and future air quality baseline, as described in **Volume 4, Chapter 5** of the **ES** (Doc Ref. 6.5) [APP-387]. The magnitude of change in NO₂, PM₁₀ and PM_{2.5} concentrations during 2028 average day or busiest day would remain imperceptible across all modelled receptors, resulting in a negligible effect which is **not significant**, as described in **Volume 4, Chapter 5** of the **ES** (Doc Ref. 6.5) [APP-387]. No further mitigation is required.

4.5 Landscape and visual

a) Introduction

- 4.5.1 This section provides an addendum to landscape and visual assessment at the southern park and ride site with reference to the following documents submitted with the Application:

- **Volume 4, Chapter 6** of the **ES** (Doc Ref. 6.8) [[APP-390](#)].

- 4.5.2 This section presents an assessment of the potential landscape and visual effects from the proposed changes (described in **section 4.2**).

b) Relevant changes

- 4.5.3 Relevant changes for the assessment of landscape and visual effects at the southern park and ride site include the extension of landscaped bund, other minor changes at the southern park and ride, including a minor reduction of the site boundary (**Change 10**).

- c) Updated assessment - Extension of landscape bund, other minor changes at the southern park and ride, including a minor reduction of the Order Limits (Change 10)

- 4.5.4 None of the proposed changes which form Change 10 would extend the study area, change the landscape baseline or result in any changes to the visual baseline or zone of theoretical visibility from those considered within **Volume 4, Chapter 6** of the **ES** (Doc Ref. 6.5) [APP-390].

- 4.5.5 The extension of the landscape bund along the north-west boundary of the site would add to the screening effect of the landscape bund indicated in **Volume 4, Chapter 6** of the **ES** (Doc Ref. 6.5) [APP-390]. Therefore, this extended landscape bund adds to the embedded mitigation relevant to landscape and visual effects as part of the design of the proposed development. However, this additional screening would not reduce the magnitude of effect on either the Plateau Estate Farmlands Landscape Character Type (LCT) or visual receptor group 3 (local road users using

the B1116 and Marlesford Road) as assessed in **Volume 4, Chapter 6** of the **ES** (Doc Ref. 6.5) [APP-390].

- 4.5.6 The proposed minor layout changes to the internal road layout would ensure that there is sufficient space along the western boundary of the site for the hedgerow planting proposed in the Application to grow. As the planting grows and becomes established, it would begin to screen views into the site from Bridleway E-288/008/0, as part of the mitigation embedded in the design. This bridleway forms part of visual receptor group 1. The additional space created would ensure that there would be reduced effects in the medium to long-term for users of the bridleway, as the hedgerow establishes. However, this would not be sufficient to change the assessment of effects for the group as a whole, because there would remain an awareness of the proposed development adjacent to the routes within this group, as assessed in **Volume 4, Chapter 6** of the **ES** (Doc Ref. 6.5) [APP-390].
- 4.5.7 The retention of private access within the site and the minor reduction to the site boundary to the south of the A12 would not change the appearance of the proposed development or the direct effects on the landscape.
- 4.5.8 As such, there are no changes to the effects presented within **Volume 4, Chapter 6** of the **ES** (Doc Ref. 6.5) [APP-390]. No further mitigation is required.

4.6 Terrestrial ecology and ornithology

a) Introduction

- 4.6.1 This section provides an addendum to the terrestrial ecology and ornithology assessment at the southern park and ride site with reference to the following documents submitted with the Application:
- **Volume 4, Chapter 7** of the **ES** (Doc Ref. 6.5) [[APP-394](#)]; and
 - **Volume 4, Appendix 7A** of the **ES** (Doc Ref. 6.5) [[APP-395](#)].
- 4.6.2 This section presents Additional Information that has been gathered since the Application was made and is summarised in sections below. The proposed changes to the southern park and ride site described within **section 4.2** of this chapter do not change the assessment of effects on terrestrial ecology and ornithology and, therefore, have not been considered further.

b) Relevant Additional Information

- 4.6.3 Relevant Additional Information for the assessment of effects on terrestrial ecology and ornithology at the southern park and ride site comprises the updated Phase 1 habitat survey (Doc Ref. 6.13(A)) [[AS-036](#)]. The survey reviewed the habitat conditions present on site and identified whether the habitats present were suitable to support protected species and recorded any incidental field signs or observations.

c) Updated assessment – Additional Information

- 4.6.4 The updated Phase 1 Habitat Survey for the southern park and ride site was completed in June 2020 (Doc Ref. 6.13(A)) [[AS-036](#)]. The updated survey did not identify any additional habitat types, protected or invasive species to those considered within **Volume 4, Appendix 7A** of the **ES** (Doc Ref. 6.5) [APP-395].
- 4.6.5 The survey confirmed that the habitats on site were unchanged since the previous surveys outlined in **Volume 4, Appendix 7A** of the **ES** (Doc Ref. 6.5) [APP-395]. The habitats on site and those within and adjacent to the site boundary continue to comprise broadleaved plantation woodland, mixed plantation woodland, scattered trees, arable fields, hedgerows, species poor semi-improved grassland, ruderal vegetation, scrub and ponds. The site continues to be assessed as suitable to support invertebrate species, amphibians, reptiles, breeding and wintering birds, bats, badgers (*Meles meles*) and brown hare (*Lepus europaeus*).
- 4.6.6 The great crested newt (*Triturus cristatus*) eDNA survey undertaken on Pond 61 did not confirm the presence of great crested newts within the pond during 2020 as reported within **Volume 3, Appendix 4.6.A** of this **ES Addendum**.
- 4.6.7 Given that no changes to the ES baseline were detected during the 2020 survey, no further assessment is required and the conclusions as presented within **Volume 4, Chapter 7** of the **ES** (Doc Ref. 6.5) [APP-394] do not change.

4.7 Amenity and recreation

a) Introduction

- 4.7.1 This section provides an addendum to amenity and recreation assessment at the southern park and ride site with reference to the following documents submitted with the Application:

- **Volume 4, Chapter 8** of the **ES** (Doc Ref. 6.5) [[APP-397](#)].

4.7.2 This section presents an assessment of the potential amenity and recreation effects from the proposed changes (described in **section 4.2**).

b) Relevant changes

4.7.3 Relevant changes for the assessment of amenity and recreation effects at the southern park and ride site include the extension of landscape bund (forming part of **Change 10**).

4.7.4 The proposed changes for the retention of the private access and the revisions to the site boundaries would not change the assessment of effects on amenity and recreation and, therefore, have not been considered further.

4.7.5 The proposed minor amendment of road layout to allow space between PRoW E-288/008/0 and the security fence to allow for proposed hedgerow planting would not change the assessment of effects on amenity and recreation because the proposed hedge formed part of the scheme assessed in **Volume 4, Chapter 8** of the **ES** (Doc Ref. 6.5) [APP-397]. This change is not considered further.

c) Updated assessment – Extension of landscape bund, other minor changes at the southern park and ride, including a minor reduction of the Order Limits (Change 10)

4.7.6 The extension of the landscape bund along the north-west boundary of the site would add to the screening effect of the landscape bund indicated in **Volume 4, Chapter 6** of the **ES** (Doc Ref. 6.5) [APP-390]. Therefore, this extended landscape bund adds to the embedded mitigation relevant to amenity and recreation effects as part of the design of the proposed development. However, the beneficial impact of this extended landscape bund would not be sufficient to change the assessment of effects assessed in **Volume 4, Chapter 8** of the **ES** (Doc Ref. 6.5) [APP-397].

4.8 Terrestrial historic environment

a) Introduction

4.8.1 This section provides an addendum to terrestrial historic environment assessment at the southern park and ride site with reference to the following documents submitted with the Application:

- **Volume 4, Chapter 9** of the **ES** (Doc Ref. 6.5) [[APP-399](#)]

4.8.2 This section presents an assessment of the potential terrestrial historic effects from the proposed changes (described in **section 4.2**).

b) Relevant changes

- 4.8.3 Relevant changes for the assessment of effects on terrestrial historic environment at the southern park and ride site comprise the extension of the landscape bund.
- 4.8.4 The proposed changes to the layout, the retention of the private access, and the revisions to the site boundary do not have the potential to change the assessment of effects on historic environment and, therefore, have not been considered further.

c) Updated assessment – Extension of landscape bund, other minor changes at the southern park and ride, including a minor reduction of the Order Limits (Change 10)

- 4.8.5 The additional length of landscape bund would only be discernible from the north. Heritage assets at Hacheston are over 800m to the north; the intervening topography, landscape and planting mean that the site is not readily visible and so no effects are anticipated to arise.
- 4.8.6 Therefore, the proposed changes would not result in a change to the assessment of effects on historic environment presented in **Volume 4, Chapter 9** of the **ES** (Doc Ref. 6.5) [APP-399].

REFERENCES

1. Department for Environment Food and Rural Affairs. (2020). Emissions Factors Toolkit (EFT) version 10.1. Available at: <https://laqm.defra.gov.uk/review-and-assessment/tools/emissions-factors-toolkit.html>. (Accessed November 2020).
2. Department for Environment Food and Rural Affairs. (2020). Background Pollutant Concentration Maps. Available at: <https://uk-air.defra.gov.uk/data/laqm-background-home>. (Accessed October 2020).
3. Department for Environment Food and Rural Affairs. (2020). NO_x to NO₂ Calculator version 8.1. Available at: <https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html#NOxNO2calc>. (Accessed October 2020).