



Landscape Briefing Note 5

Project: 1080 East Anglia One North and East Anglia Two
Date: 10th January 2021
Purpose: Notes responding to SPR's Deadline 3 submissions
Reference: 1080 BN05 Deadline 3 Responses Final R1.docx

Project Updates

1. The Project Update (EN010077-003304-ExA.AS-6.D3.V1 EA1N&EA2 Deadline 3 Project Update Note) and the accompanying Clarification Note (EN010077-003309-ExA.AS-11.D3.V1 EA1N&EA2 Onshore Substations Update Clarification Note) set out:
 - some reduced heights for buildings and structures;
 - proposed finished ground levels although these have not yet been subject to detailed studies; and
 - maximum AOD heights.

Reduced heights for buildings and structures

2. Whilst reduced heights for buildings and structures are welcome, it is noted that it is one of the smaller buildings and the slenderest of the structures that have had the greatest reductions. The GIS building which is the largest building/ structure on site has only been reduced in height by 1m and the Super Grid Transformers and associated equipment have remained at 10m. the reduction in the Harmonic Filters from 18 to 14m in height is the most visually noticeable reduction.
3. Unfortunately, in terms of understanding how these changes will affect visibility a direct comparison between the previous photomontages and the revised scheme is not possible. This is because in addition the change listed in the Project Updates Notes the layout of the substations has been completely revised, and the information about the new layout is limited and difficult to interpret as set out in the following paragraph.

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4. Page 15 of EN010077-003309-ExA.AS-11.D3.V1 EA1N&EA2 Onshore Substations Update Clarification Note includes Plate 5.2: *3D model of the updated easternmost onshore substation showing reduced footprint and building / equipment parameters*. A model showing both substations would be useful because previously it had been indicated (in the submitted OLMP General Arrangement drawing, Figure 3) that the substations would be ‘mirrored’ rather than repeated.
 5. Plate 5.2 does not provide any indication of the orientation of the eastern SPR substation. It is only possible to understand the orientation by reference to the revised OLMP General Arrangement drawing, Figure 3¹. This shows the Super Grid Transformers and associated equipment located along the north west facing edge of the substation. Assuming this represents the orientation of the eastern substation, Plate 5.2 would be more easily understood if it was rotated 90° clockwise so that the top corner of the model represented the northernmost point of the eastern substation. It has also been inferred from the OLMP General Arrangement drawing that the western SPR substation continues to be a mirror of the eastern substation.
 6. On this understanding I assume ‘access road’ means the access point into the substation. There are two external access roads to the eastern SPR substation, one along the north west facing edge and one along the south west facing edge (the edge facing the western SPR substation). The access point is from the latter. It is not clear why the external access road along the north western edge of the eastern SPR substation is required at all.
 7. In order for a proper consideration of the implications of the Project Updates to be undertaken the Appellant needs to provide a detailed/labelled plan showing all substations on a base map. It would be helpful if the Appellant provided the 3D model of the substations used in the photomontages.
 8. In the revised photomontage from Vp 2, Friston Church Road, the reduction in the height of the Harmonic Filters results in an improvement. The reorganisation of the elements within the substations, in particular the Super Grid Transformers and associated equipment, has also resulted in an improvement with regard to visual intrusiveness, although we assume these elements have not changed in height as no height reduction has been mentioned. It is the Super Grid Transformers and associated equipment within the western SPR substation that are most visually intrusive in the originally submitted Vp 2 and we do know that there has been no reduction in their ground level. As the layout of the substations is not currently a controlled element of the DCO any improvement as a result of the rearrangement of equipment cannot be

¹ EN010077-003281-8.7 EA1N Outline Landscape and Ecological Management Strategy

relied upon. If a specific arrangement is being relied upon to reduce visual intrusiveness there needs to be a specific requirement with regard to the layout. For example, any changes from the layout used for the photomontages would need to be subject to a demonstration, such as through revised photomontages, that the changes did not increase the visibility of elements within the substations.

Finished ground levels

9. It is welcome that we have at last been provided with the finished ground levels used in the photomontages. Although the eastern SPR substation is to be reduced by 2m this is the SPR substation furthest from the most sensitive receptors; Friston village and its residents and the historic farmhouses situated to the north and west of the substations. There is no proposed reduction for the western SPR substation, and the NG substation is only reduced by 0.7m which will have a negligible effect. Controlled maximum AOD heights are to be welcomed.
10. It is not clear that the difference evident in the revised photomontage from Vp 9 is a result of the reduction in ground level or the reduced building heights, although the reduction in height of the Harmonic Filters is beneficial. However, the most noticeable change here also appears to be as a result of the new arrangement, in particular the relocated Super Grid Transformers and associated equipment. As set out above the precise layout of the substations is not currently controlled by the DCO and so any resulting improvement cannot be relied on.
11. Section 3 of the Clarification Note, sets out the implications of the proposed reduction in finished ground levels. This reveals that the finished ground levels proposed in the ES would have required 78,782m³ of fill to be imported, equating to nearly 4,000 HGV Movements. I do not consider that this information has been clearly provided to date. It is difficult to understand why this level of imported fill could **ever** have been proposed. This is not a change that has been arrived at through '*engagement with the supply chain*'.
engagement with the supply chain'.
12. Only two explanations as to why the scheme as submitted had required the importation of 78,782m³ of fill seem likely. Either the applicant was looking for a location to deposit spoil from elsewhere in the project, or there was a serious failure of design. There has been a lack of evidence throughout the process to show that any detailed work had been undertaken on the design of the onshore substations to minimise their landscape impact as required by EN-1 '*to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate*'.²

² Section 5.9 of EN-1

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13. We have not seen any detailed modelling of ground levels. To understand the proposed changes, it would be helpful to see the 3D ground models used for both the original photomontages and the revised photomontages.

Conclusion on Project Updates

14. Whilst the proposed changes to the SPR substations will bring some improvements the development would remain incongruous and out of scale with the receiving landscape. The changes would not be enough to significantly reduce the magnitude of change for either landscape or visual effects. Those effects which will remain as **major adverse** during construction and through Year 1 (potentially a six-year period or longer) only reducing to **moderate/major** at year 15, based on optimistic assumptions with regard to tree growth rates.

EN010077-003227-ExA.AS-16.D3.V1 EA1N&EA2 Updated Photomontages Clarification Note

15. It is welcomed that the applicants have finally '*added a baseline photograph at the same size as the photomontage (53.5° field of view) to allow direct comparison, as recommended in Landscape Institute TGN 06/19 (published in September 2019)*'.³ However to date this has only been provided for the 3 LVIA photomontages and the 3 Cultural Heritage photomontages that have been revised. A baseline photograph at the same size as the photomontage should be provided for **all** photomontages.
16. The Updated Photomontages Clarification Note states that advance planting is no longer shown in the revised photomontages. This is welcomed. The misleading impression given by the 'advance' planting can be seen for example by comparing the original CHVp3 and the Revised CNVP3. LVIA Vps 5 and 14 at year 1 are also distorted by the introduction of unreasonably mature 'advance' planting. Of the five viewpoints that included advance planting with optimistic 3-4 years post planting growth (Viewpoints 2, 3, 4, 5 and 14) only Vp 2 is included in the revised photomontages.
17. The planting of extra heavy standards (4m at planting) is for the benefit of early screening not long-term growth, as it is commonly accepted that they take longer to establish than whips/transplants. It is also the case that they are more difficult to establish and therefore more likely to need to be replaced.
18. Whilst it is welcomed that, following comments from the Councils, the unrealistic trunks and branch structures have been replaced in the trees shown on Viewpoint 2, the unrealistic heights have been maintained.

³ EN010077-003227-ExA.AS-16.D3.V1 EA1N&EA2 Updated Photomontages Clarification Note Paragraph 13

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19. It is welcomed that the Applicant has provided a copy of the IEMA (2019) EIA Quality Mark Article⁴ - *Predicting the growth of tree and hedge planting when determining the effectiveness of mitigation*. We would note that this is a reprint of a 2013 article written for the IEMA magazine 'Transform'. As set out previously we consider that the description of this article by the Appellant as 'guidance'⁵ is misleading. We also consider that the strong caveats in the article with regard to the importance of establishing local conditions are never referred to when the document is referenced. Nor is it made clear that the growth rates quoted are only 'a rule of thumb' and that it is recommended that '*annual growth is calculated by taking clues from the existing trees and hedges in the locality.*'⁶
20. The quotations provided in Appendix 1 to the Updated Photomontages Clarification Note (Paragraphs 7 & 8) do not include references to the paragraphs which stress the importance of establishing the local conditions. Overly optimistic tree growth rates have been challenged at previous DCO examinations. They were questioned at the DCO for the Wylva Nuclear Power Station, where local growth rates were also shown to be much lower than the average, for very different reasons to those affecting tree growth in Suffolk.
21. The applicant has accepted the Councils' proposals for an adaptive planting maintenance scheme which includes '*the option to suspend / extend the maintenance periods for discrete areas of planting and target specific measures to improve such areas, in cases where the planting does not establish satisfactorily for any reason.*'⁷ Whilst this is welcomed, the suspension or extension of the maintenance period will not help to achieving the overly optimistic tree heights shown at 15 years and it is regretted that the applicant did not revise these optimistic tree heights in line with the professional evidence provided at the examination in person and in writing.
22. It is assumed that all photomontages which will have been revised for Deadline 4⁸ will:
- include a baseline photograph at the same size as the photomontage.
 - Provide more detailed information of the proposals that are being shown, such as 3D models of the substations buildings and equipment, and ground modelling ; and
 - omit misleading 'advance' planting.

⁴ Provided as Appendix 3 to EN010077-003238-ExA.HA.D3.V1 EA1N&EA2 Applicants Responses to Hearings Action Points (ISH1, CAH1, ISH2)

⁵ EN010077-003227-ExA.AS-16.D3.V1 EA1N&EA2 Updated Photomontages Clarification Note Paragraph 63 and EN010077-003281-8.7 EA1N Outline Landscape and Ecological Management Strategy (Tracked) Paragraph 107

⁶ Appendix 3 to EN010077-003238-ExA.HA.D3.V1 EA1N&EA2 Applicants Responses to Hearings Action Points (ISH1, CAH1, ISH2) Final Sentence

⁷ EN010077-003227-ExA.AS-16.D3.V1 EA1N&EA2 Updated Photomontages Clarification Note Paragraph 97

⁸ EN010077-003238-ExA.HA.D3.V1 EA1N&EA2 Applicants Responses to Hearings Action Points (ISH1, CAH1, ISH2) Page 33

EN010077-003281-8.7 EA1N Outline Landscape and Ecological Management Strategy (Tracked)

23. The commitment to pre-commencement planting has now been withdrawn and replaced with the vaguely defined ‘early’ planting which ‘may’ be implemented. The early planting is further qualified on Figure 7 OLMP Timing of Planting, as ‘*Potential early planting*’. In contrast, it was previously stated that these areas **would** be planted ‘Pre-commencement’. Even previous commitments such as ‘*as early as possible*’ have been omitted.⁹
24. The increase in individual extra heavy standard and light standard trees along hedgerow boundaries is welcomed. It is not clear what the reference to tree lined avenues¹⁰ relates to. The substations are located in a rural landscape in which tree lined avenues are not characteristic.¹¹
25. The provision of watering for the tree planting as part of an adaptive planting maintenance scheme is welcomed. However, the expert evidence of John Rose a local nursery man is that. ‘*The expected growth rates of 30cm per year for the first five years followed by 50cm per year for the ten years following is in my opinion optimistic given the present dry summers experienced in Suffolk. I would say that these growth rates are only possible given a nursery situation of intensive irrigation and care.... This would necessitate the installation and continuous use of an extensive irrigation system together with mulching to retain moisture. This is as well as weed and herbage control to maintain weed free areas around the plants.*’ We do not yet have the details of the adaptive planting maintenance scheme which are promised as part of the Landscape Management Plan, but from the details provided to date it seems unlikely that they will be equivalent to a nursery situation of intensive irrigation and care.
26. It is welcomed that the diversions to the PRoW will be in place prior to the existing PRoW being stopped up rather than by the end of the construction phase as previously proposed. It is also welcome that the correct length to be stopped up (693m) has now been acknowledged,¹² nearly 40% greater than the figure originally given (498m).

⁹ EN010077-003281-8.7 EA1N Outline Landscape and Ecological Management Strategy (Tracked) Paragraph 108 and 109

¹⁰ EN010077-003281-8.7 EA1N Outline Landscape and Ecological Management Strategy (Tracked) Paragraph 45

¹¹ EN010077-003281-8.7 EA1N Outline Landscape and Ecological Management Strategy (Tracked) Paragraphs 114 and 115

¹² EN010077-003275-8.4 EA1N Outline Public Rights of Way Strategy (Tracked) Paragraph 22

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27. Paragraph 142 refers to ‘A short PRow diversion, a medium PRow diversion and a longer PRow diversion .. for the permanent diversion of PRow ID number E3E-354/006/0.’¹³ However, the subsequent paragraphs (143-145) only describe two options for diversion. Dwg No EA1N-DEV-DRG-IBR-001046, Sheet 7 of 12 in EN010077-003260-2.6 EA1N Permanent Stopping up of PRow Plan shows that these two diversions are in fact of similar length and neither of them could be described as a ‘short’ diversion.
28. The SPR substations in Figure 9 OLMP Illustrative Plan (GIS) appear to be larger than in the other plans and the planting around the Cable End Sealing Compounds is omitted. It is assumed that these are drafting errors.
29. Given the reduction in the footprint of the SPR substations it is unclear why there has not been a proportionate reduction in area removed from agricultural use. This is additionally the case with regard to the GIS option for the NG substation. There appears to be sufficient space to the west of the proposed substations which is not planted to accommodate a further substation.

EN010077-003238-ExA.HA.D3.V1 EA1N&EA2 Applicants Responses to Hearings Action Points (ISH1, CAH1, ISH2)

30. The Applicants accept that the A12 does not exert a local influence on the character of the site and point out that it is not described as doing so in the ‘*subsequent local level assessment in the LVIA (Chapter 29) (APP-077)*’¹⁴. This is exactly the point that was being made at the Hearing, that judgements made during the RAG assessment were fundamentally flawed and that the choice of Friston as the location for the substations is unsound.
31. It is for the ExA to decide whether the features described on pages 28-20, apart from the high voltage transmission line, are genuine detractors from the rural character of the landscape surrounding Friston.

¹³ This is repeated in EN010077-003275-8.4 EA1N Outline Public Rights of Way Strategy (Tracked) Paragraph 25

¹⁴ EN010077-003238-ExA.HA.D3.V1 EA1N&EA2 Applicants Responses to Hearings Action Points (ISH1, CAH1, ISH2) Page 28