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The Cambridge South East Transport Order

Cambridgeshire County Council

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Inquiry into:

THE CAMBRIDGE SOUTH EAST TRANSPORT ORDER

PROOF OF EVIDENCE of

Jacqueline Macleod

of AtkinsRéalis

In respect of Landscape and Visual Effects

On behalf of Cambridgeshire County Council

10 November 2026

Planning Inspectorate Reference: DPI/E0535/25/7

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1. INTRODUCTION

1.1 Qualifications and Experience

1.1.1 My name is Jacqueline Macleod. I am an Associate Director Landscape Architect with AtkinsRéalis. I have a Bachelor of Science (BSc Hons) degree in Landscape Management and a subsequent Masters (Distinction) degree in Landscape Integrated Research, Planning and Practice. I am a Chartered Member of the Landscape Institute (CMLI).

1.1.2 I am a landscape architect with 20 years of experience in planning, assessment and design of major linear infrastructure projects. I head up the Landscape Technical Working Group nationally within AtkinsRealis.

1.1.3 I am providing this evidence in my capacity as a Landscape Architect with expertise in major infrastructure projects. I am instructed by the Applicant to prepare evidence for this Inquiry.

1.2 Scope of Evidence

1.2.1 The scope of my evidence is the LVIA assessment, including the approach taken to the LVIA, embedded mitigation, essential mitigation and enhancement as it relates to landscape and visual matters.

1.2.2 My evidence covers main topics of objection raised in the Third-Party Statements of Case (SoC), Objections and Representations as most relevant to landscape and visual matters.

1.3 Summary of Evidence

1.3.1 In summary, my evidence explains the requirement for my review of the landscape and visual impact assessment (LVIA) reported in chapter 11 of the ES **[CD1-10.02]**, the standards and guidance to which it adheres, and the resulting update of the methodology, landscape character assessment and levels of sensitivity for visual receptors contained in chapter 7 of the Environmental Statement Addendum (ESA) **[CD1-10.02.01]**. It states that the updates did not result in changes to the conclusions.

1.3.2 The ES predicted significant adverse construction and operational effects in relation to landscape and visual receptors, and these remain the same in the updated ESA LVIA. Where adverse effects have been identified, these have been minimised through the design of the Scheme and landscape mitigation as far as is reasonably practicable.

1.3.3 My evidence addresses the matters raised in the Objections, Statements of Case (SoC) and Representations. It concludes that mitigation has been used to minimise effects, and that residual effects are commensurate with a scheme of this nature.

2. LANDSCAPE AND VISUAL EFFECTS

2.1 Introduction

2.1.1 Detailed information about Landscape and Visual effects associated with the Scheme is provided in Chapter 11 of the Environment Statement **[CD1-10.02, pages 191-236]** which is supported by the Landscape and Visual Appendices **[CD1-10.46, CD1-10.47]**. Certain aspects of the Landscape and Visual Impact Assessment (LVIA) have been updated in chapter 7 of the Environmental Statement Addendum (ESA) **[CD1-10.02.01, pages 17-57]**, principally in relation to the methodology and landscape character sections. It still arrives at the same conclusions, and I consider it to be a robust assessment.

2.1.2 The Scheme has minimised impact through design (see Section 3.4 of this Proof for some examples of this). Significant adverse effects do remain for:

1) the Granta River Valley LCA 9D during construction and operation;

2) visual receptors represented by seventeen viewpoints during construction;

3) visual receptors represented by fourteen viewpoints at year 1;

4) visual receptors represented by seven viewpoints at year fifteen.

2.1.3 I do not consider this level of significant effects to be unusual for a scheme of this nature. This is to be expected because of a combination of the nature of the predominantly rural landscape and certain visual receptors' proximity to the Scheme. In fact, in this particular case, the level of significant effects is reduced by the existing context of the landscape, and the establishment of landscape mitigation planting through time, as I explain further below.

2.2 Planning Context

2.2.1 Landscape and visual matters for the Scheme are considered in relation to a number of national and local policies. The overarching policy guiding landscape for projects is the National Planning Policy Framework (NPPF) **[CD11-01],** the version of which that was current when the ES was written was 2021. It has since undergone several revisions with the latest version being published in August 2026 **[CD11-01.01].** The NPPF emphasises that developments should add to the overall quality of the area, respond to local character and history and reflect the identity of local surroundings and materials. Plans and documents that have policies that guide landscape and visual matters in relation to developments for this area include:

1) Cambridge Local Plan, 2018 **[CD8-01];**

2) South Cambridgeshire Local Plan, 2018 **[CD8-02];**

3) South Cambridgeshire District Council – District Design Guide Supplementary Planning Document (SPD) (2010) **[CD10-02]**; and

4) Countryside Enhancement Strategy Cambridge Southern Fringe Area Action Plan (2008) **[CD8-14]**.

2.2.2 The application of relevant LVIA planning polices, including the NPPF, is dealt with in Ms McDade's Proof of Evidence **[CD27-01 APP-W10-01]**.

2.3 Methodology

2.3.1 The proposed methodology for the LVIA was included in the EIA Scoping Report **[CD1-10.11]** and the assessment of the landscape and visual effects which were reported in the Environmental Statement **[CD1-10.02, pages 191-236]** followed this methodology. Although I did not undertake the original LVIA in the ES, I reviewed it when preparing my evidence. No concerns had been raised by third parties in SoCs as to the methodology used. However, I considered the methodology employed in the LVIA required updates to better align with the DMRB standard LA107 **[CD17-23]** and GLVIA3 **[CD15-01]**. Notwithstanding those updates, the conclusions of the LVIA remain the same.

2.3.2 Whilst the conclusions regarding significant effects remain the same following the methodological updates, I consider the updated LVIA **[CD1-10.02.01]** to be a more robust assessment. In my view, the updated methodology is also appropriate for the scale and nature of the Scheme. On this basis, I am satisfied that the LVIA has been conducted in accordance with agreed and accepted professional practice, and that it forms a reliable foundation for identifying and evaluating the landscape and visual effects of the Scheme.

2.4 Scheme Development

2.4.1 I was not involved in the development of the Scheme but my opinion is that the design of the Scheme has recognised the importance of mitigating its impact on the landscape, by, for example, incorporating mitigation planting as set out in the Landscape Mitigation Plans **[CD1-10.02, Section 11.6, page 235]**.

2.4.2 The Scheme has been designed to integrate a new transport corridor into its surrounding environment, avoiding or minimising adverse effects where possible. The development of the Scheme has also been informed by consultation and workshops with local authorities and environmental stakeholders to take account of their views, as described by Mr Baker in his Proof of Evidence **[CD27-01 APP-W2-01, page 34]**.

2.4.3 Mitigation is embedded into the Scheme design to minimise potential adverse landscape and visual effects. Embedded mitigation refers to the design measures that are integrated into the Scheme from the outset to avoid or reduce potential adverse landscape and visual effects. These include the alignment of the route and siting of elements such as the travel hub, to avoid woodland loss wherever possible and utilise existing woodland as screening.

2.4.4 The route of the busway has been developed with consideration of potential landscape and visual effects, whilst bearing in mind the constraints of the engineering standards required for the safe construction and operation of the Scheme. The design of the Scheme has sought to work with the natural contours of the land to minimise so far as possible earthworks that would disturb the landform or create extensive areas of earthwork cuttings or embankments. The route has also sought to avoid or minimise effects on areas of existing vegetation such as woodlands and hedgerows. The design has been informed by the Design Principles set out in the Design and Access Statement **[CD1-17.01, page 74]**.

2.4.5 This approach to minimising impacts through design has continued more recently. For example, in the recent revisions to the travel hub layout, the hard infrastructure, including the building and areas of hardstanding, has moved closer to the A11. This further reduces the impact on landscape character by minimising intrusion into open arable areas and increasing the landscape buffer planting between the travel hub and fields beyond. The updated landscape design also retains tree AT025, as specifically requested by GCSP. Similarly, the change to the land parcel immediately south of Francis Crick Avenue has resulted in two proposed ponds (Ecological Ponds 1 and 2) being relocated, and the opportunity has been taken to adopt a more naturalised form which helps to better integrate them into the landscape.

2.5 Mitigation Measures

2.5.1 The Scheme includes an extensive suite of mitigation measures to further limit its landscape and visual impact by including, for example, new areas of woodland planting, hedgerows, individual trees, and grass seeding.

2.5.2 The measures seek to blend the busway into the surrounding landscape using earth shaping, seeding and planting **[CD1-10.02, pages 23–25; CD1-10.05]**. These measures also help to mitigate visual impacts from people's houses, places of work and rights of way. These mitigation measures have been considered in the assessment of the effects of the Scheme resulting in a reduction of the adverse effects **[CD1-10.02, pages 23-26]**. They require the acquisition of land or the acquisition of rights over land but are considered necessary to enable the satisfactory implementation of the Scheme. The mitigation measures are described in detail in the Landscape and Ecological Management Plan **[CD1-10.05]**.

2.5.3 Through these measures the design of the Scheme will minimise the impact on landscape character and will reduce the visual effects on receptors in homes, places of work or recreation. In time, the Scheme will integrate with the existing landscape and its effect on the surrounding area will be further reduced for most receptors.

2.6 Findings of predicted impacts and likely significant effects

2.6.1 Below I describe the findings of the updated LVIA **[CD1-10.02.01, Chapter 7, pages 17-57]**. The conclusions (significance of effect) have not altered from the original LVIA **[CD1-10.02.01, Section 7.5, page 57]**. However, there are changes to the methodology to align with landscape industry standards and guidance (as set out above in Section 2.3) and in the use of the Greater Cambridge Landscape Character Assessment **[CD15-03]** to align with the published county LCAs.

2.6.2 As a result, in some cases the Landscape Character Areas differ in both their location and/or extent and in the names used to refer to them. In particular the updated LVIA **[CD1-10.02.01, Chapter 7, pages 17-57]** has used the published county landscape character assessment - Greater Cambridge Landscape Character Assessment **[CD15-03]** which refers to the Granta River Valley LCA and its geographic extent is focused on the narrow river valley rather than the wider expanse of the Granta Valley LCA referred to in the original LVIA in the ES **[CD1-10.02, pages 191-236]**.

2.7 Temporary Construction Landscape Effects

2.7.1 The construction of the Scheme will include the temporary (up to 26 months) introduction of construction-related features and intrusive elements into the landscape that will have an impact on landscape fabric and character, as well as on views and visual amenity. The construction activities include seven construction compounds **[CD1-12.09]** across the Scheme, along with the presence of plant, cranes, increased road use from construction traffic, and temporary lighting. Construction mitigation is outlined in the CEMP **[CD1-10.08]**.

2.7.2 During construction, the Scheme will introduce construction related activities into the landscape resulting in a change in the character of agricultural fields where construction compounds are located and the character of the fields which the Scheme runs through. The temporary nature of construction activities, along with embedded mitigation, would have a relatively short-term effect on the area with only the Granta River Valley LCA 9D assessed to experience a large adverse effect (significant) **[CD1-10.02.01, Chapter 7, page 32 & 43]**.

2.8 Temporary Construction Landscape Effects

2.8.1 Visually, during construction, the effects of the Scheme are anticipated to range from neutral to large adverse with significant effects predicted for receptors at seventeen of the thirty-three representative viewpoints[1].

2.9 Permanent and Operational Landscape Effects

2.9.1 After construction is complete the Scheme will be set within the LCAs noted in the updated LVIA **[CD1-10.02.01, Section 7.3, pages 20–24]**, including the urban landscape at the southern edge of Cambridge, suburban, and rural landscapes.

2.9.2 Where the route runs through the rural landscape it will result in the loss of areas of agricultural land and will introduce built elements, lighting and vehicles into the landscape. The original LVIA in the ES was based on five Landscape Character Assessments in the study area **[CD1-10.02, Figure 11.1, page 197]** and found significant large adverse effect for the Granta Valley LCA at year one and moderate adverse effect at year 15 **[CD1-10.02, Table 11.10, pages 218–219]**. The updated LVIA in the ESA **[CD1-10.02.01]** assigns levels of sensitivity to the eight Landscape Character Areas in the study area ranging from low to high sensitivity, with the Gog Magog Chalk Hills LCA 7B and Eastern Chalk Hills LCA 7A noted as having high sensitivity **[CD1-10.02.01, Table 7-11, page 23]**. I considered the sensitivity and magnitude of impact on the LCAs and concluded that only the Granta River Valley LCA 9D would have a large adverse (significant) effect at year 1 **[CD1-10.02.01, Table 7-14, page 43]**. However, following the establishment of mitigation at year 15 this will reduce to moderate adverse (significant) **[CD1-10.02.01, Table 7-14, page 43]**. To summarise, the methodology and LCA locations and extents have altered between the two assessments, but the conclusions (significance levels) remain the same.

2.9.3 The mitigation measures are a response to the potential adverse landscape effects. In my view, they include a suite of planting proposals that reflect the character of planting in the local area. The measures are set out in the Landscape and Ecological Management Plan (LEMP) **[CD1-10.05]**. They include hedgerows along much of the route, similar to those which line the minor roads in the area, and small copses of trees to screen and integrate the bus stops and parking areas into the landscape. Over time, the relatively narrow busway carriageway with its

[1] *Viewpoints 4, 6, 7, 8, 14, 15, 16, 17, 19, 20, 22, 24, 25, 26, 27, 28 and 30 [CD1-10.44]*

associated landscape mitigation of hedgerows and woodlands and the intermittent presence of vehicles on it would be absorbed into the landscape character of the area in a similar way to other vehicle routes I observed in the LVIA study area for the Scheme.

2.10 Permanent and Operational Visual Effects

2.10.1 Adverse visual effects are assessed to range from neutral to large adverse at Year 1, with significant effects predicted for fourteen representative viewpoints[2] **[CD1-10.02.01, Table 7-14, pages 43–56]**. As the new planting establishes throughout the operational period, it will enhance visual amenity and further screen the Scheme from the visual receptors. In time, with the establishment of the planting, the visual effect of the busway will be reduced noticeably. Following establishment of mitigation planting by year 15 after opening, moderate adverse effects (significant) are predicted at seven of the representative viewpoints[3] with no viewpoints having large adverse effects **[CD1-10.02.01, Table 7-14, pages 43–56]**.

2.11 Conclusions

2.11.1 Although the Scheme would have an adverse effect on the landscape of the area and on sensitive visual receptors during construction and in the opening year, the mitigation measures embedded in the design and proposed as part of the Scheme will reduce effects. For most receptors, effects will be reduced to a level that is not considered significant by the 15th year after opening, although my view is that there will still be significant effects on the Granta River Valley LCA 9D and some visual receptors at this stage.

2.11.2 The landscape and visual effects of the Scheme fall to be considered as part of the wider 'planning balance' of harms/benefits (which balanced assessment is undertaken in the evidence of Ms McDade **[CD27-01 APP-W10-01**]). In my view, the levels of impact of the Scheme are commensurate with, and to be expected of, a scheme of this type. Further, for a scheme of this nature, in the context of the landscape character, and with mitigation where it is possible, I consider the residual impacts are proportionate.

3. THIRD PARTY OBJECTIONS, STATEMENTS OF CASE AND REPRESENTATIONS

3.1 Introduction

3.1.1 This section of my proof of evidence responds to the Objections, SoCs and Representations submitted by third parties and statutory consultees that are relevant to landscape and visual matters.

3.1.2 The following paragraphs set out the matters raised in relation to landscape and visual issues, with my response to each matter in the form of the important considerations I have taken into account, the reasoning process I have used, and my resulting conclusions.

3.1.3 I also consider that some of the objections and representations to the Scheme overstate the landscape and visual effect of the Scheme, which is not borne out by an objective assessment using a recognised methodology.

3.1.4 An objection was submitted by Richard Buxton Solicitors on behalf of Stephen Partridge-Hicks and Kelly Hathaway; Better Ways for Busways (BW4B) and Hobson's Conduit Trust **[CD2-OBJ-440]**.

3.1.5 On the matter of 'irreparable landscape harm', it is stated that the LVIA fails to properly account for the sensitivities of the landscape's character and visual importance to the city in its openness and tranquility **[CD2-OBJ-440, pages 8-9]**.

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[2] *Viewpoints 4, 7, 8, 14, 15, 16, 17, 19, 20, 22, 24, 25, 26 and 30. [CD1-10.44]*

[3] *Viewpoints 4, 16, 20, 22, 24, 26 and 30 [CD1-10.44]*

3.1.6 In considering the above, I have had regard to the published Greater Cambridgeshire Landscape Character Assessment **[CD15-03]** which sets out the key landscape characteristics of the LCAs and refers to openness and tranquillity where these are relevant. As explained above (see Section 2.5 within this Proof), although this was not referred to in the original LVIA contained in the ES **[CD1-10.02]**, it has been used in the updated LVIA contained in the ESA **[CD1-10.02.01]**.

1) The methodology within the updated LVIA **[CD1-10.02.01, Section 7.2, pages 17-20]** sets out the sensitivity criteria and levels for both the landscape and visual receptors and in doing so follows the approach set out in the Guidelines for Landscape and Visual Impact Assessment 3rd edition (GLVIA3) **[CD15-01]** and the Design Manual for Roads and Bridges LA107 Landscape and Visual Effects **[CD17-23]**, which was also based on GLVIA3. These are industry standard documents for determining methodology for LVIA. The changes to the sensitivity do not result in any changes to the conclusions on the significance of effect.

2) The published Greater Cambridgeshire Landscape Character Assessment **[CD15-03]** sets out the key landscape characteristics of the LCAs within the project study area. None of the LCAs within the project study area has openness listed as a characteristic. Only the Fens LCA north of Cambridge has openness listed as a landscape sensitivity **[CD15-03, page 66]**. However, the updated LVIA does address openness in terms of localised character. For example, it explains that where there is less woodland, the proposed landscape mitigation planting will be grassland mixes and specimen trees with some hedgerows. Locations of the proposed landscape mitigation planting elements are illustrated in the Landscape Mitigation Plans **[CD1-10.05]**. In conclusion, the landscape is open in terms of its role in the Green Belt, but openness is not a defining characteristic of the landscape in terms of its character. In addition, tranquillity is not a defining characteristic because of existing detractors including the A11 and A1307. Notwithstanding this, the updated LVIA does still consider tranquillity for these LCAs in determining their sensitivity (see Table 7-11 of the ESA **[CD1-10.02.01, page 23]**.

3) On the matter of tranquillity, tranquillity is not listed in the Greater Cambridgeshire Landscape Character Assessment as a key characteristic of any of the LCAs within the study area for the project **[CD15-03]**. For LCAs within the study area, the Greater Cambridgeshire Landscape Character Assessment Eastern Chalk Hills LCA 7A does mention tranquillity but only in the context that the A11 forms much of the northern boundary locally, detracting from tranquillity **[CD15-03, pages 190-193]**. Similarly, for the Gog Magog Chalk Hills LCA 7B it states that tranquillity is locally eroded by the A11 and the A1307 **[CD15-03, pages 194-197]**.

3.1.7 For the reason that the updated LVIA methodology does properly, (in accordance with industry standards and guidance), address the sensitivities of the landscape and for the reason that the updated LVIA considers the key characteristics set out in the Greater Cambridge Landscape Character Assessment **[CD15-03]**, addressing what is relevant to the LCAs within the study area, the updated LVIA demonstrates that significant harm on openness or tranquility does not follow as a result of the rating afforded to sensitivity as part of the landscape assessment process.

3.1.8 In response to the matters raised in the objection following a review of the LVIA undertaken by Peter Ranmall **[CD2-OBJ-440, pages 15-44]**, I will address these in turn.

1) Uniform sensitivity is given for LCAs raising potential for localised variations in sensitivity to be overlooked with a specific concern regarding the Nine Wells LNR not being given the appropriate level of sensitivity which might result in an incorrect level of significance on the LCA. The busway would be visible only a short distance from the LNR **[CD2-OBJ-440, pages 18-20]**.

2) A 'Very High' category of sensitivity has not been given for the Gog Magog Hills based on the SSSI designation **[CD2-OBJ-440, page 20]**.

3) The percentage of viewpoints being categorised as high value or sensitivity and the Granta Valley LCA [sic] having moderate significance at year 15, and the impact of the

busway on the views for residents of the villages it passes and the concern regarding landscape mitigation **[CD2-OBJ-440, pages 20-21]**.

4) The BW4B alternative is stated to be better able to accommodate change without adverse effects **[CD2-OBJ-440, pages 28-29]**.

3.1.9 In considering the above, I have had regard to the updated LVIA methodology, GLVIA3 **[CD15-01]** and the DMRB LA107 guidance and standards **[CD17-23]**, and the Greater Cambridge Landscape Character Assessment **[CD15-03]**.

3.1.10 On the matter of item 1, uniform sensitivity and Nine Wells LNR:

1) Sensitivity is determined using the criteria set out in the updated LVIA methodology in the ESA **[CD1-10.02.01, Section 7.2, pages 17-20]**. Sensitivity has been informed by both landscape value and susceptibility and uses the criteria set out in the DMRB LA107 standard **[CD17-23]**, which has been informed by GLVIA3 **[CD15-01]**. These are industry standard documents for determining LVIA methodology. In coming to my evaluation of the value, susceptibility and the resulting sensitivity of the landscape receptor, there are elements of the criteria which are more objective (such as designations, cultural value or national importance) and other elements which are more subjective (such as tranquillity, and the ability of the landscape to accommodate the change). In making my judgements, I have used a combination of desk-based information and field-based experience and drawn upon many years of landscape assessment. I consider that my judgement can be relied upon.

2) The 2km study area has 8 LCAs which lie partly within it **[CD1-10.02.01, pages 23-24]**. I consider the LCAs to be at an appropriate scale because the National Landscape Character Areas are too large for the level of detail required, and further dividing the LCAs used into smaller Local Landscape Character Areas would not be helpful as they would not be large enough to give the context of the landscape. Nine Wells LNR lies within the Cam and Granta Tributaries Lowland Farmland LCA 3D which is determined as medium sensitivity **[CD1-10.02.01, Table 7-11, page 23]**. The LNR cannot be high sensitivity as the criteria for high sensitivity is landscapes of high national importance such as UNESCO World Heritage Sites or National Parks. Landscapes of local or regional importance sit within the criteria for medium sensitivity **[CD1-10.02.01, Section 7.2, pages 17-18]**. Views from the LNR are contained within it due its heavily wooded nature. The proposed bridge crossing to the north of the LNR is not reported as a 'significant landscape effect', not because of the sensitivity rating, but because of the wider landscape context of the adjacent urban character of south Cambridge, it's Biomedical Campus (CBC) and its associated much larger bridge and transport structures **[CD1-10.02.01, Section 7.3, pages 21-23]**.

3.1.11 On the matter of item 2, no landscape receptors have been afforded very high sensitivity in the LVIA because there are no international/nationally important landscapes within the LCAs in the study area. The SSSI designation for the Gog Magog Hills is not relevant to the assessment for landscape purposes because it is an ecological designation, not a landscape designation.

3.1.12 On the matter of item 3, many of the visual receptors are afforded high sensitivity as represented by the viewpoint locations **[CD1-10.02.01, Table 7-12, pages 25-29]**. The Granta River Valley LCA will have a residual significant adverse effect of moderate **[CD1-10.02.01, Table 7-14, page 43]**. The villages do not lie within the Granta River Valley LCA. The visual impact assessment sets out the significance of effect on views for residents.

3.1.13 On the matter of item 4, without a full LVIA it is not possible to state that there would be no adverse effects upon the landscape and visual receptors as a result of the BW4B alternative. Having said this, I accept that the Technical Note on the on-road alternative **[CD1-25.07]** includes a high-level appraisal of impact on the landscape and visual receptors and finds impact is likely to be limited due to the existing road alignment. I would agree with this

statement but would qualify that by saying that while effects will be more limited, it is not possible to state to what level without an actual LVIA assessment being undertaken.

3.1.14 For the reasons that the sensitivity methodology is robust, that the scale of LCA used is correct, that the visual impact assessment includes residents in villages, I consider that the updated LVIA is justified in its findings **[CD1-10.02, pages 191-236 & CD1-10.02.01, pages 17-57]**.

3.2 The Statement of Case (SoC) submitted on behalf of Stephen Partridge-Hicks and Kelly Hathaway and Better Ways for Busways (BW4B) [CD3-23 OBJ-440].

1) It is stated that 'irreparable landscape harm' will be caused as the busway routes through important, highly valued, iconic and fragile landscapes that frame Cambridge to the south **[CD3-23, pages 12-13]**.
2) It is stated that the LVIA fails to properly account for the sensitivities of the landscape's character and visual importance to the city both in its openness and tranquillity **[CD3-23, pages 12-13]**.
3) It is stated that the LVIA assumes landscape character is uniform, overlooking the sensitivity of the Gog Magog Hills **[CD3-23, pages 12-13]**.
4) The percentage of viewpoints being categorised as high value or sensitivity and the Granta Valley LCA [sic] having moderate significance at year 15, and the impact of the busway on the views for residents of the villages it passes and the concern regarding landscape mitigation **[CD3-23, pages 12-13]**.
5) It is stated that the BW4B alternative scheme will have significantly lower impact on the landscape **[CD3-23, page 9]**.
6) It is stated that the Scheme will have a greater impact on visual amenity particularly in relation to the key purpose of the Green Belt – to reduce urban sprawl by keeping land permanently open **[CD3-23, pages 12-13]** than would the on-road alternative.

3.2.1 In considering the above, for items 2-5 inclusive I refer to my previous responses on these matters although I will respond to the matter of the sensitivity concern raised regarding Gog Magog Hills. In considering the Gog Magog Hills sensitivity and item 1 I have had regard to the updated LVIA methodology, GLVIA3 **[CD15-01]** and the DMRB LA107 guidance and standards **[CD17-23]**, and the Greater Cambridge Landscape Character Assessment **[CD15-03]**.

3.2.2 On the matter of item 1, the landscape south of Cambridge is not without value, but it does not fit the criteria for high value set out in the updated LVIA methodology. A key characteristic of the Cam and Granta Tributaries Lowland Farmlands LCA 3D and the Gog Magog Chalk Hills LCA 7B set out in the Greater Cambridge Landscape Character Assessment is that these areas contribute to the setting of Cambridge **[CD15-03, pages 119-122, pages 194-197]** and that the LCA 7B is ecologically diverse which has been recognised in the updated LVIA **[CD1-10.02.01, Table 7-11, page 23]**. There is no description of this area as iconic or fragile.

3.2.3 On the matter of item 3, I should add that the Gog Magog Chalk Hills LCA 7B is afforded high sensitivity in the updated LVIA **[CD1-10.02.01, Table 7-11, page 23]**.

3.2.4 On the matter of item 6, the openness of Green Belt will be adversely affected by temporary works (26 months) e.g. work compounds, but these will revert to their previous land use on completion of the construction period **[CD1-10.02, Section 2.2, page 32]**. Some parts of the Green Belt are more open than others and the landscape mitigation proposals which will be in place during operation reflect this, whereby more open areas have seeding and specimen trees proposed and less open areas have woodland proposed **[CD1-10.02, Section 2.1, pages 23–25]**. Notwithstanding that, I accept that the effect of the Scheme on the openness of the Green Belt is likely to be greater than for the on-road alternative.

3.2.5 For the reason that updated LVIA methodology does properly (in accordance with industry standards and guidance) address the sensitivities of the landscape and for the reason that the updated LVIA considers the key characteristics set out in the Greater Cambridge Landscape Character Assessment **[CD15-03]**, addressing what is relevant to the LCAs within the study area, the updated LVIA **[CD1-10.02.01]** demonstrates that significant effects would not be the result of these matters not having been properly assessed. The LVIA acknowledges significant effects where this is likely in considering a combination of sensitivity with the magnitude of impact.

3.3 The Statement of Case submitted by the Campaign for Rural England (CPRE) [CD2-OBJ-382]

3.3.1 It is stated that the busway will introduce high earth banks and of particular concern is the bridge across the Cam valley.

3.3.2 In considering this, I have had regard to the updated LVIA **[CD1-10.02, pages 191-236 & CD1-10.02.01, pages 17-57]** and the Greater Cambridge Landscape Character Assessment findings **[CD15-03]** and agree that there will be likely significant adverse effects resulting from the bridge crossings of the Granta River within the Granta River Valley LCA 9D both in the opening year and residually **[CD1-10.02.01, Table 7-14, page 43]**. Note, no bridges or indeed any other elements of the Scheme lie within the Cam River Valley **[CD1-10.02.01, Figure 7-1, page 24]** (as denoted in the LCAs mapped within the Greater Cambridge Landscape Character Assessment). The River Granta Babraham Crossing Bridge location and River Granta Stapleford Crossing Bridge have landscape mitigation proposed which will help to soften the structural elements and embankments, but it will not be able to completely screen them due to the scale and elevation of the structures required to facilitate the river crossing.

3.4 The Objection from Hobson's Conduit Trust [CD2-OBJ-435, CD3-26 OBJ-435]

1) It sets out concern in General Objection 1 (para.30) regarding the impact on the general character of the highly sensitive area of land around Nine Wells, the principal source of Hobson's Brook **[CD2-OBJ-435, page 10]**.
2) It states (para. 32) that the landscape character would be completely altered by the new Hobson's Bridge **[CD2-OBJ-435, page 11]**.
3) It states (para. 34) that the busway would cause irreparable harm to the landscape setting of Nine Wells and Hobson's Brook **[CD2-OBJ-435, page 11]**.
4) Various aspects of the design should be altered to reduce harmful effects drainage, ecology and landscape (para. 77) **[CD2-OBJ-435, page 23]**.
5) Specifically to landscape, (para. 109 (a)) it states that the LVIA has placed Nine Wells and Hobson's Brook in the Granta Valley LCA, which these locations are not. It states they should be classed as high sensitivity **[CD2-OBJ-435, page 31]**.
6) Specifically to landscape, (para. 109 (b)) it states that the busway should be a significant effect in views from Nine Wells (Viewpoint 6) **[CD2-OBJ-435, pages 31-32]**.

3.4.1 In considering this, I have had regard to the updated LVIA **[CD1-10.02, pages 191-236 & CD1-10.02.01, pages 17-57]** and the Greater Cambridge Landscape Character Assessment **[CD15-03]**.

3.4.2 On the matter in item 1, Nine Wells and Hobson's Brook lie within the Cam and Granta Tributaries Lowland Farmlands LCA 3D. In line with the sensitivity criteria, this is afforded medium sensitivity (i.e. not a nationally important site) **[CD1-10.02.01, Table 7-11, page 23]**. Even if it were afforded a high sensitivity rating that would not necessarily result in a significant effect. For example, and as indicated in the matrix Table 7-9 within the ESA **[CD1-10.02.01, page 20]**, both medium and high sensitivity plus minor magnitude of impact can either result in a slight significance of effect or a moderate one.

3.4.3 On the matter in item 2, Nine Wells and Hobson's Brook lie within the Cam and Granta Tributaries Lowland Farmlands LCA 3D which has been assessed in line with the criteria set out in the DMRB standards **[CD17-23]** and GLVIA3 guidance **[CD15-01]**. The LCA, which is extensive within the study area, would not be completely altered by the addition of Hobson's Bridge which would be seen in the context of the other transport infrastructure including the railway and the existing Addenbrookes Road bridge to the south of the Cambridge Biomedical Campus. The photograph from the entrance to Nine Wells LNR ES Appendix 11.1 Viewpoint Photo Sheets (Viewpoint 6) shows the landscape setting of the LNR **[CD1-10.44]**.

3.4.4 On the matter in item 3, please see my response to item 2 above. There is no direct impact on Nine Wells. The photograph from the entrance to Nine Wells LNR ES Appendix 11.1 Viewpoint Photo Sheets (Viewpoint 6) shows the landscape setting of the LNR in terms of the aspect that faces west towards the Scheme **[CD1-10.44]** which includes agriculture, the railway, the Addenbrookes Road Bridge and other infrastructure elements.

3.4.5 On the matter in item 4. Changes in the design have been made to address Hobson's Conduit Trust's concerns and are set out in Mark Connelly's Proof of Evidence **[CD27-01 APP-W9-01]**.

3.4.6 On the matter in item 5 of Nine Wells and Hobson's Brook not being in the Granta Valley, I agree. They lie within the Cam and Granta Tributaries Lowland Farmlands LCA 3D. This has been addressed in the updated LVIA in the ESA. However, they are not candidates for being afforded high sensitivity as they do not meet the criteria for that as explained above.

3.4.7 On the matter of item 6, views are limited from within the LNR due to the woodland vegetation. Views from the entrance are shown in ES Appendix 11.1 Viewpoint Photo Sheets (Viewpoint 6) **[CD1-10.44]** where the view will be in the context of other infrastructure as set out in my response to item 2 above. Appendix 11.2 Photomontages shows the view of the busway looking back towards the LNR and shows intervening vegetation **[CD1-10.45]**. The updated LVIA **[CD1-10.02.01]** finds a moderate adverse effect at construction, reducing to slight during operation for both the opening year and year fifteen and I would agree with that.

3.4.8 For the reasons set out above, namely that industry standards have been followed to determine sensitivity and to assess the landscape character, and that there is no direct impact on the LNR, and its landscape setting has been considered in the context of the existing landscape elements and features, I am of the opinion that the findings of the updated LVIA are robust.

3.5 The Statement of Case of Greater Cambridge Shared Planning Service (GCSP) [CD3-20 REP-04]

1) GCSP are in agreement with the conclusions of the LVIA within the ES. They are also in agreement that the proposal is in accordance with the SCLP policies (HQ/1 Design Principles; NH/2 Protecting and enhancing landscape character; NH6 protecting green infrastructure; NH8 Green Belt) **[CD8-02, pages 115-118, pages 125-126]** and the CLP policies (55 Response to place and 8 Setting of the city) **[CD8-01, pages 44-48, pages 187-188]**. GCSP expects the Design Principles document to be appended to the planning documents and that they should include information/more detail on matters such as more trees around SuDS; the colour and materiality of busway barriers; the finishes of bridge structures; reinforced embankment planting; and consider an identity for all furniture and signage associated with the bus stops and the travel hub.
2) In considering my response I have had regard to the Design Principles and knowledge of the process of design for linear infrastructure which typically starts with a preliminary design, moving to specimen and/or detailed design at a later stage.
3) The Design Principles are appended to the Design Access Statement and have been agreed with GCSP. Further engagement will be undertaken at the detailed design stage when the Design Principles will be developed and agreed. **[CD1-17.01, page 74]**.

3.6 The Statement of Case B Reeve, (local resident) [CD3-14 OBJ-04]

1) The SoC raises the matter of the impact on openness of the Green Belt generally.
2) The SoC raises the matter of the role of the Gog Magog Hills in terms of their contribution to 'sense of place'.
3) The SoC raises the matter of the proposed Hobson's Brook bridge reducing openness.
4) It raises the matter of the scale of the bridge (not specific to which one) over the River Granta in relation to impact on landscape. And the other bridge in relation to openness.
5) It raises the matter of change in views out of Great Shelford.
6) There are concerns regarding the impact on landscape character, noting that there are significant residual effects to the Granta Valley, noting areas of landscape close to the Granta Valley are also impacted.

3.6.1 In considering the above, I have had regard to the NPPF **[CD11-01.01]**, updated LVIA **[CD1-10.02, pages 191-236 & CD1-10.02.01, pages 17-57]** and the Greater Cambridge Landscape Character Assessment **[CD15-03]**.

3.6.2 On the matter of item 1, Green Belt is primarily a planning related designation. However, NPPF GB6 states that substantial weight should be given to potential harm to the Green Belt including its 'openness' which I address here **[CD11-01.01, pages 63-64]**. The Scheme lies entirely within the Green Belt. The landscapes within the updated LVIA assessment study area have their key characteristics identified in the Greater Cambridge Landscape Assessment **[CD15-03]**. None of the LCAs within the study area have openness listed as a key characteristic. Notwithstanding that, during construction, temporary elements such as engineering operations and work compounds increase the scale of the Scheme and will affect openness. All temporary land taken for construction will be reinstated and restored to its original use and reduce the scale of the Scheme by the opening year **[CD1-10.02, Section 2.2, pages 27-36]**. During operation, the Scheme's infrastructure is not a dense mass as it is, a linear busway. The main area which will experience some increased infrastructure mass is the travel hub. The travel hub is located on the boundary of the Green Belt at the elevated junction of the A11 and is sited in the context of that highway infrastructure. The form and scale of the proposed bridge structures and traffic movement upon them, will be perceived as urban elements in the Green Belt and will adversely affect the openness of the Green Belt **[CD1-15.04, Section 2.2, pages 10-11]**. Landscape mitigation planting proposals integrate with the existing landscape character – in more open areas, mitigation focuses on seeding and specimen trees, whereas in less open areas, woodland is also proposed. Hedgerow mitigation can be found in many areas of the Scheme. This approach maximises the role of mitigation planting in helping address impact on openness. In summary, my view is that there is an impact on openness but that it is minimised as far as can reasonably be expected for a scheme of this nature and that openness is not a key characteristic of the LCAs in landscape and visual terms.

3.6.3 On the matter of item 2, the Greater Cambridge Landscape Assessment key characteristics for the Gog Magog Chalk Hills LCA 7B, cited in the updated LVIA **[CD1-10.02.01, Table 7-10, pages 21-22]** recognises the contribution this landscape makes to the setting of Cambridge. Table 7-11 recognises the role of this landscape in its strong sense of place **[CD1-10.02.01, page 23]**. It is determined to have a high sensitivity as set out in the updated LVIA and a slight adverse effect from construction through to residual effect at year fifteen.

3.6.4 On the matter of item 3, none of the LCAs within the study area have openness listed as a key characteristic. The updated LVIA (Table 7-14) recognises that the bridge crossing Hobson's Brook will be a much larger structure than the existing Hobson's Brook bridge but also that it will be experienced in the context of the railway line, CBC and the Addenbrooke's Road bridge **[CD1-10.02.01, page 41]**. The Hobson's Brook bridge has been reduced in scale following further consultation with HCT and its potential impact on openness has therefore been minimised.

3.6.5 On the matter of item 4, both bridges over the River Granta will introduce additional large-scale structures into the Granta River Valley LCA 9D. The updated LVIA concludes that the bridge structures, together with the associated Scheme infrastructure, will adversely affect the character of the Granta River Valley during construction and operation **[CD1-10.02.01, Tables 7-13 and 7-14, pages 31–56]**. It will also reduce the sense of openness. A balance must be struck between maximising screening using planting mitigation and retaining a sense of openness with regard to the landscape character. It is my opinion that landscape mitigation in the form of seeding, specimen trees, hedgerow and some woodland is balanced.

3.6.6 On the matter of item 5, views for visual receptors (people) associated with Great Shelford have been assessed in the LVIA and are represented by Viewpoints 9, 10 and 14 **[CD1-10.02.01, Table 7-13 and Table 7-14, pages 31–56]**. For some of the receptors the change will result in a slight adverse effect during construction and operation, but for others represented by Viewpoint 14 it will be significant large adverse at both construction and operation **[CD1-10.02.01, Table 7-13 and Table 7-14, pages 31–56].** There are variations depending on whether views are oblique, from upper stories, or during hours of darkness and also whether they are from local footpaths. As is standard in the LVIA methodology approach, all views are from publicly accessible locations only, 'grouping' of visual receptors was undertaken, and in some cases, assumptions must be made (e.g. likely views from upper stories). The significant adverse effect for visual receptors is a matter for the planning balance and is addressed in Ms. McDade's Proof **[CD27-01 APP-W10-01]**.

3.6.7 On the matter of item 6, I agree that a significant residual effect will remain for the Granta River Valley LCA 9D as set out in the LVIA **[CD1-10.02.01, Table 7-14, page 43]**. This is a matter for the planning balance and is set out in Ms. McDade's Proof **[CD27-01 APP-W10-01]**.

3.6.8 For the reasons set out above, there are adverse impacts on openness, on landscape character, and on visual receptors as a result of the elements of the Scheme. However, mitigation has been proposed to avoid these impacts being greater than they might otherwise be. Further, there is a commitment through the Design Principles to put into effect additional mitigation. Accordingly, I consider that the landscape and visual impact has been minimised as much as it can be given the nature and location of the Scheme.

3.7 Representation of C Burton, Greater Cambridge Planning [CD2-Rep-04]

3.7.1 This raises the matter of further clarification within the LVIA to take account of recently completed developments near to the route and proposed solar canopies at the travel hub. It is said that this is required prior to the determination to ensure adequate assessment of the Scheme on landscape and identify appropriate mitigation.

3.7.2 In response to this, I would refer to chapter 8 of the Environmental Statement Addendum **[CD1-10.02.01, pages 58-72]** which updates the cumulative impact assessment for the Scheme and confirms that there are no new significant effects identified since the cumulative assessment was reported in the ES.

4. CONCLUSION

4.1 My evidence demonstrates that the landscape and visual matters pertaining to the Scheme have been considered appropriately and the relevant landscape standards and guidance have informed the assessment.

4.2 All large-scale infrastructure projects have landscape and visual effects. The effects have been mitigated as far as reasonably practicable. The residual effects determined in the landscape and visual assessment for the Scheme are typical of those associated with linear infrastructure projects within a rural/semi-rural landscape.

5. STATEMENT OF TRUTH

5.1 The evidence which I have prepared and provided in this Proof of Evidence is true and is given in accordance with the guidance of my professional institution. I confirm that the opinions expressed are my true and professional opinions.