#### National Infrastructure Planning

Sent by email only to: LowerThamesCrossing@planninginspectorate.gov.uk

Your Ref: TR010032 Kent Downs AONB Unit Interested Party Ref: 20035310



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Dear Sir/Madam,

Application by National Highways for an Order Granting Development Consent for the Lower Thames Crossing

Response of the Kent Downs AONB Unit to Procedural Deadline D

Post event submission including written submission of oral comments made at Issue Specific Hearing 6 Mitigation, Compensation and Land Requirements, held on Friday 8<sup>th</sup> September 2023. Including responses to ISH 6 requested Action Points.

This response was prepared by Katie Miller (MRTPI), Kent Downs AONB Planning Manager and Nick Johannsen FLI (Fellow of the Landscape Institute) Kent Downs AONB Unit Director.

Thank you for inviting us to speak at Issue Specific Hearing 6 and inviting a post event submission following attendance at the above hearing, please find below the Kent Downs AONB Unit's written comments on the Mitigation, Compensation and Land Requirements Hearing.

### 1. & 2. Agenda and purpose.

The agenda was clear that 'this Issue Specific Hearing will focus primarily on the impact of the Project on terrestrial biodiversity. However, there may be some crossover into landscaping and landscape impacts.' It is important in this context that landscape is understood 'in the round' and that it encompasses much more than biodiversity; landscape includes a complex array of components as described in <a href="Landscape">Landscape</a> Character Assessment guidance and the 'Landscape wheel' published by Natural England.

The Kent Downs AONB Unit is concerned both with landscape impacts and biodiversity impacts.

It is important that landscape (as an approach 'a landscape led approach') is understood to be distinct from a 'landscape scale' which is often referred to in biodiversity management or nature recovery. Landscape scale for biodiversity management or nature recovery simply refers to the scale at which the interventions or strategies are scoped or made; a landscape scale is not necessarily a landscape led approach, which would encompass all of the complex components of landscape. The Kent Downs AONB Management Plan provides a helpful description of a landscape led approach (pp26).

Anglesey

Arnside and Silverdale

Blackdown Hills

Cannock Chase

Chichester Harbour

Chilterns

Clwydian Range

Cornwall

Cotswolds

Gower

Cranbourne Chase and

West Wiltshire

Downs

Dedham Vale

Dorset

East Devon

Forest of Bowland

Howardian Hills

High Weald

Isle of Wight

Isles of Scilly

#### **Kent Downs**

Lincolnshire Wolds

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Malvern Hills

Mendip Hills Nidderdale

Norfolk Coast

N ... D

North Devon North Pennines

North Wessex

Downs

Northumberland Coast

Quantock Hills

Shropshire Hills

Solway Coast South Devon

Suffolk Coast and

Heaths

Surrey Hills

Tamar Valley

We recognise and welcome that the ExA is considering a Landscape Issue Specific Hearing and would be very pleased to participate in this discussion should it go ahead.

#### 3. Mitigation, Compensation and Enhancement

#### a) Distinctions between Mitigation, Compensation and Enhancement

ii Are there any notable disparities in the application material around what constitutes mitigation, compensation or enhancement that could have implications for the ExA's assessment?

We strongly support the various interventions at the hearing which requested a clearly navigable 'route map' which links the impacts of the scheme with mitigation, compensation and enhancement proposals, without which it is difficult to 'route find' in the complex documents, i.e. to understand what mitigation is proposed, where to respond to an identified impact.

It is the view of the Kent Downs AONB Unit that in terms of landscape impact to the AONB, the harm arising from the scheme is not capable of being mitigated, and this position has been accepted and is borne out in the conclusions of the Landscape and Visual impacts Chapter of the Environmental Assessment. As such, in line with the requirements of NPSNN, alternative means of meeting the need that avoid the AONB should be sought, and we retain an in principle strong objection to the scheme on account of the impacts on the Kent Downs AONB.

If, however the ExA conclude that there has been adequate examination of alternative routes and alternative means of meeting the outcomes; that there are exceptional circumstances demonstrated and that the scheme is in the public interest; as it is accepted that this impact cannot be mitigated, the proposal should make provision for compensatory enhancement elsewhere in the AONB. The provision of such investment would not make this an acceptable proposal from an AONB perspective.

This position is reflected in the GLVIA3, where, at paragraph 4.33 it states 'It is debatable whether full offsetting of adverse effects is possible. For example, a new area of woodland may eventually offset the loss of an existing highly valued mature woodland in visual and landscape terms, but it is unlikely that it would compensate for the loss of established habitat or amenity value in the period between its establishment and its full development. Similarly, loss of an area of ancient woodland cannot, by definition, be compensated for other than in timescales extending over generations. Therefore, offsetting and compensation should generally be regarded as measures of last resort.' Ccompensatory enhancement to the AONB would however be in line with the provisions of NPSNN paragraph 5.153 that 'Where consent is given in these areas, the Secretary of State should be satisfied that the applicant has ensured that the project will be carried out to high environmental standards and where possible includes measures to enhance other aspects of the environment.'

We also argue that within the AONB greater focus needs to be applied to mitigating harm in other ways such as:

- enhanced green bridge design (see below), more stringent design principles,
- replacement of Park Pale bridge with a green bridge
- Woodland planting to south of the High Speed 1 Rail Line (instead of 'shrubs with intermittent trees') to provide long-term filtering and screening of views towards the Project and help integrate it with its landscape setting:
- Relaxation of normal highway design standards to allow measures such as smaller signs/gantries, colours appropriate to AONB context to reduce impact (as has been successfully deployed in the Kent Downs AONB on the A20 approach to Dover).

Even with the above measures incorporated it would still not be possible to fully mitigate for the harm the scheme would cause to the AONB landscape. (This is borne out in the Environment Statement -LVIA Chapter where a moderate adverse significance of effect is predicted at Design Year on the local landscape character of the Kent Downs AONB (West Kent Downs LCA) and for several visual receptors within the AONB, even with mitigation; we have consistently argued that these effects are under predicted.

Therefore, in the event of the proposal proceeding, significant compensatory investment should be made to secure landscape benefits to the AONB elsewhere in line with Management Plan principle SD 12 'Transport and infrastructure schemes and growth areas are expected to avoid the Kent Downs AONB. Unavoidable developments will be expected to fit unobtrusively into the landscape, respect landscape character, be mitigated by sympathetic landscape, buffering, land bridges and design measures and provide compensatory measures through benefits to natural beauty elsewhere in the AONB'.

#### b) Extent and Type of Landscaping

i There is a "landscape scale" strategy proposed for mitigating and compensating the loss of habitats, but the ExA would like to explore if this is the most appropriate method for mitigating and compensating for impact.

We noted that in the discussion that the applicant drew attention to distinction between landscape scale and landscaping as discussed above. Our advice would be that a **landscape led strategy** should be prepared, which operates at a landscape scale, and which should consider going beyond the order limits is important, such a strategy does not exist.

The approach for mitigating and compensating for loss to habitats does not add up to a 'landscape scale strategy' and it is certainly not a landscape led strategy.

A Landscape Led strategy is especially important terms of AONB impacts, as the proposed mitigation and compensation sites are generally located outside of the AONB boundary. Where mitigation/compensation is proposed within the AONB boundary, this does not always reflect the existing or historic landscape character, such as the woodland planting proposed in the area around Park Pale, which has a parkland character that would be lost with proposed woodland planting.

#### c) Biodiversity Net Gain (BNG)

The Applicant will be asked to explain why, albeit not policy at present, it cannot commit to a minimum of 10% net gain.

The Kent Downs AONB Unit would like to draw the attention of the ExA to the Kent Nature Partnership's (KNP) position on Biodiversity Net Gain (BNG) provision in Kent.

The KNP is proposing a county-wide approach to BNG with the ambition that it be adopted by all Kent's planning authorities, that will deliver good outcomes for both nature and communities, as well as providing consistency for developers.

The KNP promotes the adoption of 20% biodiversity net gain (BNG) target for the county's planning authorities, The 20% target has been justified by viability evidence. Further information can be found here:

We would encourage the scheme to adopt the Kent Nature Partnership 20% target. We noted that the applicant felt that they could not achieve 10% within the order limits and that they had considered buying BNG credits in order to make up the shortfall. We were surprised that they had

not considered delivering BNG offsite through existing nature partnerships and in our case the AONB operating in the purview of the scheme, rather than on the open market.

#### 4. Green Bridges

#### a) Purpose of Green Bridges

## i What is the overall purpose of the Green Bridges in this Project and what determined their location?

At the Hearing the applicant and participants were clear that the Green Bridges had multiple functions beyond biodiversity connections.

Given the identified lack of opportunities for mitigation of the scheme within the AONB, (mainly due to the potential for mitigation alongside the A2/M2 being restricted as a result of the constraints associated with the proposal to locate the diverted utilities corridors adjacent to the A2/M2), the incorporation of Green Bridges into the scheme provides the greatest opportunity to help mitigate the impacts of the severance of the landscape within the AONB as well as providing connectivity for habitats and an improved experience for recreational users crossing the A2. It is therefore essential that the green bridges are exemplary and ambitious in their design and of a sufficient scale and width to help fulfil this purpose, they should accord with best published practice.

The proposed scheme removes AONB mitigation planting from previous approved schemes (eg HS1), which arguably may not have been acceptable or approved without that agreed mitigation. This removal underpins the importance of an exemplary approach to green bridges as the best remaining opportunity to provide AONB landscape mitigation.

The proposed green bridges provide only limited benefit. In order to further mitigate impacts to the Kent Downs AONB, opportunities for replacing the existing Park Pale overbridge with a green bridge is in our view a high priority. If this was designed to an appropriate scale, not only would it help to mitigate landscape severance, it would also provide an enhanced experience for recreational users of PRoW NS161 (public footpath) and National Cycle Route 177 that both cross the bridge and signal an entrance gateway at the eastern boundary of the Kent Downs AONB.

We disagree with National Highways position that a green bridge is not needed at Park Pale to mitigate the impacts of the Project identified in the environmental assessment, given that the EA identifies that 'some of the most affected views would be those from Park Pale overbridge' (7.9.14 ES Chapter 7) and that it predicts there would be residual moderate adverse effects on the landscape character of the West Kent Downs (sub area Shorne) LLCA within the West Kent Downs LCA 1A, within which the bridge lies. While National Highways advise that 'there is extensive replacement tree and shrub planting and ancient woodland compensation planting proposed in the Park Pale area to help reduce the landscape and visual effects associated with the Project', this does not mitigate for either the severance of the landscape, nor the experience of recreational users of this bridge.

Replacing Park Pale bridge with a green bridge and enhancing the scale and mitigation impact of the other green bridges in the AONB would be in accordance with the Landscape Institute's Technical Guidance Note on Green Bridge Design <u>link</u> which states that 'When considering if a green bridge is an appropriate option the key drivers will be ecological, landscape and access considerations. The requirement for a green bridge may be driven by one of these, or by multiple drivers. Even where a project has only one main driver, the use of a green bridge may provide multiple benefits beyond that of the driver. The table below identifies the key drivers and likely triggers in relation to these.' (Page 3) The table identifies that severance of a historic landscape

and locating infrastructure within a statutory designated landscape as being drivers and triggers for the provision of a green bridge.

Providing more exemplary enhanced green bridges at Thong Lane South and Brewers Road and replacing the Park Pale bridge with a green bridge would also be a way of addressing the requirement specified at 5.153 of the NPSNN that 'Where consent is given in these areas (National Parks, the Broads and Areas of Outstanding Natural Beauty), the Secretary of State should be satisfied that the applicant has ensured that the project will be carried out to high environmental standards and where possible includes measures to enhance other aspects of the environment. Where necessary, the Secretary of State should consider the imposition of appropriate requirements to ensure these standards are delivered.'

ii The ExA wants to understand what best practice design guidance has been used to inform the size, design and functionality of the green bridges and whether that guidance has been effectively deployed to this Project.

In respect of the green bridges within the AONB, National Highways advises that it has followed the Landscape Institute's guidance for the design of the green bridges, which recommends the width of a mixed-use bridge be 15-20m, They also advise that the guidance states 'To determine the width, the minimum width of the natural zone should be calculated, based on the project aims in terms of target species' and that the width of the Brewers Road and Thong Lane South green bridges have been designed 'to provide continuity of habitat for dormice and other small mammals and to help mitigate visual impacts through the provision of a wooded connection between the woodlands north and south of the A2 and to mark the gateway into the AONB'.

The guidance they refer to and rely on relates to designing for ecological connectivity however, rather than published guidance for green bridges seeking to achieve landscape connections. In the discussion, all parties agreed that green bridges were intended to be multifunctional, not simply for vehicle passage and biodiversity connection. Indeed, the application submission documents identify that the green bridges will 'restore previously broken links across the landscape....'.

Guidance on Green Bridge Design is provided in the Landscape Institute's Technical Guidance Note on Green Bridge Design <a href="Link.">Link</a>. This draws on advice in the Natural England Commissioned Report 'NECR181 Green Bridges - A literature review' First published 27 July 2015 <a href="Link.">Link</a>. Both documents identify the importance of appropriate width, depth and gradients of green bridges, with the Natural England report advising that in relation to width and length, 'Bridges with aims to achieve connections at a landscape/ecosystem level should be over 80m in width. Bridges which aim to achieve connections for species at a population level should be around 50m (published guidance recommendations range from 25m-80m, with an average of 50m). Bridges below 20m in width are not recommended as frequency of use has been found to be lower. A width to length ratio over 0.8 is recommended' (paragraph 4.10). The Landscape Institutes Guidance Note repeats the recommendation that 'Bridges aiming to achieve connections at a landscape/ecosystem level should be over 80m in width' (page 8).

The proposed green bridge at Thong Lane South is approximately 41 metres wide, while that at Brewers Road would be 32 metres, however the 'green' parts would comprise 21.5m and 11.5metres respectively. The Natural England Guidance specifies that if the area of green is less than 20 metres in width, it is unlikely to be effective. It is our view that much broader bridges should be provided and designed according to best practice guidance (meaning a minimum width of circa. 80 metres (green), allowing for wider tracts of vegetation on both sides of the bridge and on either side of the Walkers, Cyclists and Horse riders route to ensure that recreational users are less exposed to the views and noise of the widened A2 and to provide a better functioning

ecological and landscape linkage as well as signalling an entrance gateway to the Kent Downs AONB.

# iii What is the target species for each of the green bridges and how are they specifically provided for?

As identified above, for those green bridges within/adjacent to the Kent Downs AONB, the role of the green bridges should go beyond ecological connectivity and they should be designed to provide landscape led connectivity at a landscape scale to help mitigate the severance of the AONB landscape arising from the proposed works to and adjacent to the A2 as it passes through the Kent Downs landscape.

The current green bridge proposals do not represent the effective deployment of the guidance in our view.

#### b) Maintenance and Monitoring

ii What monitoring is expected to occur / be required and by whom to determine the effectiveness of the Green Bridges for biodiversity enhancement purposes and how is this secured in the DCO?

Monitoring of the effectiveness of the green bridges in delivering their stated objectives should be secured on a rolling basis and for the lifetime of the bridge, in the same way that other parts of the highways are monitored on a continuing basis (such as quality of road surface, drainage etc). The monitoring of its effectiveness for biodiversity should be carried out by suitably qualified ecologists. Given the essential role the Thong Lane South and Brewers Road Green Bridges would have as landscape mitigation, the effectiveness of these bridges for landscape enhancement should also be monitored on a seasonal basis for the life of the bridges, by suitably qualified landscape professionals. There should be clear legal responsibilities to maintain, manage and enhance (i.e., respond to deficiencies) in all green infrastructure provided should the scheme go ahead in a way that meets the defined outcomes for the green infrastructure investment.

Monitoring should be for all intended functions of green bridges and other green infrastructure (mitigating and compensatory investments) not just biodiversity.

Monitoring should be regular (at least annual) or seasonal where appropriate, consistent (i.e., the methodology should be consistent over time so that trends can be understood), should conducted by appropriately qualified experts and should be outcome (function) focused.

If monitoring demonstrates that the intended outcomes of the green bridge are not being met, then the ability to enhance the provision (respond to deficiencies in intended outcomes) should be fully provided for.

Remedial action should be a requirement where deficiencies in meeting stated outcomes are identified through monitoring.

### 6. Nitrogen Deposition Compensation

v. The ExA would like to hear from Stakeholders about whether the Applicant's approach to Nitrogen Deposition is robust.

No.

The vast majority of sites identified as being harmfully affected by nitrogen deposition are south of the Thames and either within the AONB or its immediate setting (of the 176.4ha of land predicted to be affected, less than 19 ha would be north of the river, which equates to 89 percent of the impacts occurring south of the river) Despite this, the majority of the proposed compensation sites are north of the river – with just 43ha out of the now proposed total 205ha (i.e. with the Burham site removed and Bluebell Hill site reduced) being provided south of the river which equates to just 21% of the total compensation land.

The applicant accepted in the hearing that compensation should be as close to the impact as possible.

Given the huge disparity of effects that is predicted north and south of the river, the combined approach to nitrogen deposition mitigation for the entire scheme that has been proposed and consequent inequitable apportionment of compensation away from where impacts have been predicted to occur is wholly inappropriate. From an ecological perspective, it would be more beneficial to have the compensation as close as possible to where the harm arises. The need for impacts within the Kent Downs to be addressed is particularly important given that the rich and distinctive biodiversity habitats of the Kent Downs AONBs are specifically recognised as one of its Special Characteristics.

The LTC Document 10.4 Change Application (August 2023) Appendix B - Minor Refinement Consultation Report (link) does not address or respond to the concerns raised by the AONB Unit in our consultation response objecting to the omission/reduction of compensation sites, despite purporting to be a document that responds to all comments made.

The proposed reduction in overall compensation land south of the river also has further implications for other aspects of the DCO submission. One example of this is at paragraph F.5.52 of the Planning Statement - Appendix F Kent Downs AONB where it is stated that the scheme would deliver 'landscape scale enhancement through the delivery of the nitrogen deposition compensation sites'. In our view, the significant proposed reduction in the scale of the Bluebell Hill compensation site no longer represents a 'landscape scale' enhancement.

The discussion at the hearing made us more, not less, concerned about the applicant's approach.

The applicant justified the changed approach in three essential ways; first that the land proposed, and justified as being provided for Nitrogen Deposition mitigation was no longer easily available; the second point was that it (or at least some of it) was entering into a Countryside Stewardship Scheme and thirdly there were sufficient ecological connections to make the previously proposed sites in the AONB not really matter anyway.

We believe that these are weak arguments (at best) given our points above, the applicant's own evidence and previous approach and the nature of the ecological harm.

With regards to the land no longer being easily available; there may be other opportunities to secure land near the impact which may not have been adequately examined, and if that is not the case we also noted (as did the Ex A and KCC) that Compulsory Acquisition has been previously justified for Nitrogen Deposition mitigation by the applicant and so it should be deployed if required to properly mitigate the Nitrogen Deposition impacts of the scheme identified by the applicant.

We do not believe that the fact that the land is entered into a Countryside Stewardship scheme is a remotely adequate reason to reduce the area nor seek compensation land elsewhere. Countryside Stewardship is a temporary grant to achieve other (i.e. not Nitrogen Deposition mitigation) environmental and landscape outcomes. Importantly it is temporary in its nature and the landowner can withdraw at any time (albeit there may be penalties); there is no guarantee of future funding

and so it simply cannot be argued that CSS provides Nitrogen Deposition mitigation in any meaningful way for the Scheme.

The change in approach was justified also by providing new ecological connectivity where it is currently weak (i.e., north of the river). This approach does not respond to the applicant's own mitigation objectives for Nitrogen Deposition, nor the identified ecological impacts themselves. The applicant states that the objectives of compensation sites which is 'to both increase the amount of high quality wildlife-rich habitat, and position this new habitat to forge strong links between areas of retained semi-natural habitat within the network of designated sites across the wider landscape (6.1 Environmental Statement Chapter 8 – Terrestrial Biodiversity Volume 6 pp98)

It seems clear to us that the applicant's stated objective is **primarily** to position new habitat close to the affected designated habitats. The document goes on to talk about building resilience and ecological networks, but, again, this relates to the affected sites themselves...

'This would build resilience of the ecological networks that support the nitrogen deposition affected sites and therefore build the resilience of the affected sites themselves.'

The primary impact of Nitrogen Deposition is to the quality of the habitat, this is demonstrated in the submission documents (e.g., sensitive ancient woodland assemblages) rather than ecological connectivity. We cannot see how providing new habitat in Essex might mitigate Nitrogen Deposition impacts on an internationally important wildlife sites in Kent, this approach seems completely counter to the applicant's own stated objectives and evidence.

References ES, Chapter 8, Appendix 8.14 – Designated Sites Air Quality Assessment *link:* 

The ExA helpfully made the point that the applicant had accepted in its submissions that Compulsory Acquisition is justified with respect to the environmental impacts of Nitrogen Deposition, indeed an area of compensation land larger than that which is currently proposed is justified, we therefore think that the applicant already has a justified route to providing nitrogen deposition mitigation closer to the impact which we believe they should deploy.

Finally, in the meeting there was discussion of potential 'double counting' issues. We would like to question whether Nitrogen Deposition mitigation can be claimed (e.g. at Hole Farm) on a 'legacy' site which will be delivered (is being delivered) <a href="https://www.forestryengland.uk/hole-farm">https://www.forestryengland.uk/hole-farm</a> anyway therefore cannot reasonably be counted as mitigation for a scheme which is yet to be given permission, or not as the case may be.

We hope that these comments are helpful and clear but would be happy to provide further information if requested.

Yours faithfully



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