

Technical note:

Development of Bristol Airport to Accommodate 12 Million Passengers Per Annum: Response to Comments on Landscape

1. Introduction

This note has been prepared in response to comments provided by North Somerset Council (NSC)¹, the Mendip Hills Area of Outstanding Natural Beauty (AONB) Partnership² and Natural England (NE)³ on the Landscape and Visual Impact Assessment (LVIA) contained in the Environmental Statement (ES) that was submitted in support of a planning application for the proposed development of Bristol Airport to accommodate 12 million passengers per annum (mppa) (Application No. 18/P/5118/OUT).

The NSC response is wide-ranging, covering not only the Mendip Hills AONB, but also the landscape and visual receptors sited closer to Bristol Airport. It also includes comments on the landscape related issues in the Design and Access Statement (DAS) and the mitigation measures set out in the integrated /embedded landscape, visual and ecological mitigation masterplan. Comments received from the AONB Partnership and NE, meanwhile, focus specifically on impacts on the Mendip Hills AONB. This technical note reviews these issues, and where necessary, sets out BAL's response. It is supported by the following figures produced in respect of the proposed A38 highways works and which are submitted alongside the technical note:

- Existing tree survey;
- Soft landscape plan;
- Tree retention, removal and planting plan.

Additionally, **Appendix A** to this technical note includes a photomontage visualisation and supporting technical note in respect of the proposed A38 highways works.

2. North Somerset Council Response

2.1 Introduction

The NSC response discusses issues relating to landscape character (including in respect of the proposed A38 highways improvements), visual impacts and lighting and dark skies (mainly in relation to the Mendip Hills AONB). The NSC response also reviews the planting proposals incorporated in the integrated /embedded landscape, visual and ecological mitigation masterplan submitted in support of the planning application.

¹ Dated 25.01.19.

² Dated 29.01.19.

³ Dated 25.01.19.

The NSC response does not specifically comment upon the methodology used in the LVIA and does not challenge the conclusion of any of the individual assessments. In its introduction, the NSC response states that the content of the scoping document and the LVIA (termed “*the additional assessment*”) is agreed. It is therefore assumed that NSC does not require any additional information in respect of the *Guidelines for Landscape and Visual Impact Assessment Third Edition* ⁴ (GVLIA3) based methodology nor that the LVIA is extended to include any additional landscape or visual receptors. The response to NSC consequently focuses upon requests for clarification and, in some instances, more detailed information to explain the conclusions reached for individual receptors (or receptor groups) in the LVIA.

2.2 Landscape Issues

NSC summarise the main conclusions of the assessment of effects upon Landscape Character Areas (LCAs) in a manner that accurately reflects the principal issues that were dealt with in the landscape assessment. This comment extends to LCAs located within the Mendip Hills AONB. NSC accepts that the proposed extension to the Silver Zone car park (Phase 2) will result in only a minor landscape impact which is not significant and is acceptable.

A38/Main Entrance – local landscape character

Issue raised

NSC raises a concern regarding the impacts of the proposed changes to the main airport entrance and the A38/Downside Road junction. NSC states that it assesses that “*local impacts on landscape character*” will see some “*moderate if not significant change*” and that officers require “*some assurance than an effective landscape scheme can be re-established ...*”.

It is noted that officers do agree with the landscape assessment conclusion that the host LCA: Broadfield Down Settled Limestone Plateau will sustain an effect that will be minor and not significant. It is the professional opinion of the authors of the landscape assessment that even at the more local scale of the portion of the host LCA sited around the A38 and main airport entrance, the effects of upon landscape character for the operation period (Year 1 and 15) should be assessed as minor and not significant. This assessment is based upon the new development that NSC refer to being spatially restricted to previously developed parts of the northern area and that the principle of an acoustic barrier has already been accepted under the 10mppa planning permission (as is acknowledged later in the NSC response).

During a subsequent site visit, planning officers at NSC requested that a suitable visualisation be provided to illustrate the proposed highway works and the impact of the associated loss of vegetation.

BAL response

The proposed highway works including widening of the A38 will not alter the local landscape character as the A38 is already the locally dominant landscape element. More detailed design of the A38 scheme and a detailed tree survey for the area potentially impacted by the proposed highway works has been undertaken. A review of tree loss and retention plans confirms that loss of existing shrubs and trees will be substantially restricted to the area immediately alongside the sections of A38 and Downside Road close to the remodelled junction (as anticipated in the LVIA, specifically Table G.32 in Appendix G9). It is proposed that the lost vegetation and the steepened embankment alongside the affected section of the A38 (including alongside

⁴ The Landscape Institute and Institute of Environmental Management and Assessment, (2013). *Guidelines for Landscape and Visual Impact Assessment*. 3rd edition. London. Routledge.

the residential properties of High Lands and Greenacre) will be replanted with a native hedgerow and native woodland edge shrub and grassland seeding mixes.

All of the survey and soft landscaping plans referred to above are appended to this response.

The relevant tree loss and retention plan and planting plan, as well as the junction design and levels information, have been utilised to provide a photomontage visualisation that aids the assessment of effects upon the local landscape character. The photomontage visualisation has been produced in accordance with best practice as defined by the Landscape Institute⁵ and is appended to this response. Additional verification is provided by an appended associated figure that overlies the tree loss and retention plan onto a 2017 aerial photograph to show the spatial extent of the canopies of the trees to be lost and retained.

Comparison of the photomontage visualisation and the baseline photograph confirms that the balance of hard and soft landscape elements in the landscape within which the A38 highways works will be located will not alter as a consequence of the proposed works. The widened A38 and remodelled junction, and the retained and, once established, the replanted vegetation, will have the same appearance and same landscape roles as the present landscape elements. The existing and proposed car parking and built development in the closest part of the airport will not become visible and will therefore not increase their minimal baseline influence on the local landscape character in this area.

Northside

Issue raised

NSC has commented that there are no detailed landscape layouts for the northside area of Bristol Airport. However, officers acknowledge the contribution that will be made to the reduction of the potential visual impacts of the proposed Multi-storey Car Park (MSCP) Phase 3 and the extension to the terminal building by the planting proposed in the integrated /embedded landscape, visual and ecological mitigation masterplan at locations 1) and 2). Officers similarly acknowledge the visual role that the planting in the western part of the northern carpark (as shown on page 58 of the Design and Access Statement submitted in support of the planning application) will fulfil for the MSCP.

BAL response

BAL has given in-depth consideration to how to take forward the outline proposals for the northside that are contained in the integrated /embedded landscape, visual and ecological mitigation masterplan, especially with regard to minimising the local landscape impact that will be generated by the presence of MSCP Phase 3. However, it should be reiterated that: first, the LVIA that has been produced is in support of an outline planning application for MSCP Phase 3; second, in accordance with GLVIA3⁶, the landscape assessment upon the host LCA has used a worst case scenario and concluded that landscape effects would be not significant; and third, that similar scale built development is already present on the northern part of the airport that facilitates a good understanding of likely impacts upon established landscape character. Taking these factors into account, BAL considers that submission of further detailed design information demonstrating that impacts upon local landscape character in the northside area will be minimised should only be provided when an application(s) for reserved matters are submitted.

⁵ The Landscape Institute, (2011). Advice Note 01/11 – Photography and photomontage in landscape and visual impact assessment. Landscape Institute, London.

⁶ The Landscape Institute and Institute of Environmental Management and Assessment, (2013). Guidelines for Landscape and Visual Impact Assessment. 3rd edition. London. Routledge

Mendip Hills AONB

Issue raised

The NSC response does not explicitly raise the issue of impacts upon the Mendip Hills AONB. In the section of NSC's response headed 'Lighting/Impact upon dark skies', reference is made to the Lighting Impact Assessment (which is included in the ES) and the manner in which night-time baseline photography from selected viewpoints within the AONB allow an understanding of the contribution made by lighting at Bristol Airport to overall lighting impacts upon the AONB and dark skies within it. The response notes that *"the lighting impact upon the AONB of the 12 mppa proposals are assessed to be minor and therefore acceptable"*.

BAL response

BAL interprets the response quoted above, along with the absence of any other comment upon impacts upon the key characteristics of the AONB, to be an indication that NSC concur with the conclusion of the landscape assessment as set out in Table 9F.1 in Appendix 9F of the ES, i.e. that the effect upon the AONB will be not significant.

2.3 Visual Issues

Overall number of significant visual effects

Issue raised

NSC confirms that the selection of visual receptors within the visual assessment is fit for purpose. NSC does not dispute any of the visual assessments detailed or overall conclusions presented in Chapter 9 of the ES. NSC reiterates the conclusions of the visual assessment that significant visual effects will only be sustained by a single visual receptor (residents at Melody Cottage). Although the NSC response quotes at length from the detailed visual assessments contained in Appendix 9G, for a small number of groups of visual receptors mainly located to the north of Bristol Airport, the response does not question the conclusion of these assessments or request any additional supporting information.

BAL response

BAL is pleased to note that NSC agrees with the results of the visual assessment component of the LVIA.

Visual impacts upon residential visual receptors at Melody Cottage

Issue raised

NSC concurs with the detailed visual assessment set out in Table 9G.3 (Appendix 9G) of the ES in which visual impacts upon Melody Cottage are differentiated from those that will be experienced by other residential receptors in properties in the residential group defined as 'Downside, east of Cook's Bridle Path'. NSC concurs that significant adverse visual effects will not extend to Operation Year 15. NSC notes that similar impacts will be experienced by other visual receptors travelling east along the closest section of Downside Road, although these groups of visual receptors are ascribed with lower visual sensitivity and their views will be fleeting, hence visual effects will be not significant. NSC also notes that the principle proposed component of the proposed 12 mppa development that may generate the visual impact will be MSCP Phase 3. NSC requests a more detailed planting plan than that provided by the integrated /embedded landscape, visual and ecological mitigation masterplan and highlights the importance of ensuring that

perimeter planting proposed in the integrated /embedded landscape, visual and ecological mitigation masterplan is provided *"as an early phase of the 12 mppa application."*

BAL response

BAL acknowledges and concurs with NSC's observations. However, as set out in the earlier section on landscape issues, BAL does not consider that it is necessary to provide a detailed design at this stage and intends that these issues are dealt with at the reserved matters stage. However, BAL agrees that the early implementation of the required planting proposals that will be a key component of the mitigation will increase its effectiveness for this residential visual receptor. BAL will consequently strive to ensure that the planting is undertaken at the earliest feasible planting season.

3. Mendip Hills AONB Partnership and Natural England Responses

3.1 Introduction

The responses of the Mendip Hills AONB Partnership and NE can be divided into two issues or 'characteristics' of the AONB (as defined in the current AONB Management Plan⁷), namely outward views and tranquillity.

3.2 Effects Upon the Mendip Hills AONB

Key characteristic - outward views

Issue raised

With regard to impacts of the operation of the proposed development on outward views from the northern parts of AONB, NE concurs with the detailed assessment in Table 9G.1 of the ES. This uses the daytime and night-time baseline photography and daytime photomontages from viewpoints located in the AONB (as agreed through consultation) to conclude that the proposed development will not have significant impacts upon this key characteristic of the AONB.

The AONB Partnership does not agree with the AONB assessment on this key characteristic. The response states that Bristol Airport is visible from a number of *"key open access viewpoints across the Mendip Hills AONB such as hills above Blagdon and the wider area, Burrington Ham and Beacon Batch, impacting on the sense of remoteness and naturalness of the area."* However, the response makes no requests for additional information or analysis.

BAL response

BAL agrees with the NE response on this issue. With regard to the AONB Partnership's response, BAL considers that the quoted statements do not accord with the baseline situation that was observed during site visits and which was set out in the baseline for the AONB and the viewpoint baseline photography in figures in the LVIA. The ground level facilities at Bristol Airport are only readily apparent in outward views from the

⁷ Landscapes for Life (2013). Mendip Hills Area of Outstanding Natural Beauty (AONB) Management Plan 2014-19, [online]. Available at: <http://www.mendiphillsaonb.org.uk/wp-content/uploads/2012/12/Mendip-Hills-AONB-Management-Plan-Nov-2013.pdf> [Checked 16/04/18].

small proportion of the northern part AONB, primarily around Beacon Batch which forms its most elevated part. The ground level facilities at the existing airport site, including the ATC Tower which at a height of 28.9m is much taller than any component of the proposed development, cannot be readily discerned from viewpoints other than Beacon Batch. All components of the proposed development will be located below the relevant section of the northern horizon that is formed by the Oatfield Ridgeline (maximum elevation 206m AOD). It is agreed that, as illustrated in the night-time baseline photography, lighting at Bristol Airport is visible at night from Burrington Ham and Beacon Batch.

As highlighted in the commentary in the assessment of effects upon AONB Special Quality 2 - views out, calculations for the coverage of the Zone of Theoretical Visibility (ZTV) for the present and completed and components of the permitted 10 mppa development that were started by November 2018 show that they will be potentially visible from 14.5% of the part of the AONB in the study area. By comparison, calculations for the coverage of the ZTV for proposed development show that it will be potentially visible from 14.6% of the part of the AONB in the study area. These calculations are a worst case scenario making no allowance for the screening provided by vegetation, whilst site visits (and the baseline viewpoint photographs in the LVIA) show that in some parts of the northern AONB, tree cover can provide a high level of filtering and screening in views. Consequently, existing and proposed built components at Bristol Airport will be visible (in favourable weather conditions) from only a smaller percentage of the AONB.

Tranquillity

Issue raised

NE has raised concerns with regard to the impact on perceptual attributes, i.e. tranquillity, from aircraft flying overhead and traffic movements and they consider that *"any increases in the frequency of aircraft using flight paths (over the AONB) could be significant."* The AONB Partnership's response highlights concerns about adverse impacts upon baseline tranquillity levels and hence upon two of the 12 special qualities of the Mendip Hills AONB. These concerns are related to: increased numbers of aircraft movements over the AONB; increased levels of traffic usage on minor roads within the AONB; increased levels of light pollution, principally skyglow, upon the dark skies experienced in the AONB; and cumulative effects with a number of permitted and proposed residential developments sited close to the northern boundary of the AONB.

BAL response

The contribution likely to be made by the operation of the proposed development including increased aircraft movements and vehicle traffic was included in the detailed assessment upon the two relevant special qualities set out in Table G9.1 of the ES. This assessment drew upon information presented in other chapters of the ES and other publicly available documentation. The contribution of the incremental changes to the baseline lighting levels at Bristol Airport as set out in the Lighting Impact Assessment was referenced in the assessment in Table 9G.1. Likewise, an indication of the contribution made by the baseline lighting at the airport was provided in the night-time baseline viewpoint photography and the description of the night-time baseline conditions in the AONB in the LVIA. The potential for cumulative impacts upon the AONB were addressed in the cumulative assessment chapter (Chapter 18) of the ES. BAL therefore considers that these issues have been adequately addressed in the ES and consequently wishes to make no further comments on these specific issues.

BAL notes that there is no readily transferable, established methodology for undertaking assessments upon tranquillity arising from a specific proposed development. BAL has nevertheless provided further information on impacts on the AONB in its separate response to comments received from NSC in respect of noise. This confirms that noise levels at the AONB are very low and that any increase in noise associated with the proposed development and including increased aircraft movements would be extremely small (less than less than 1 dB(A)).

4. Summary

The responses to the LVIA chapter of the ES submitted in support of the planning application for the proposed development of Bristol Airport to accommodate 12 mppa have been reviewed in detail.

The consultees do not disagree with the conclusions of the visual assessment, i.e. that only a single visual receptor will sustain significant adverse effects and that these will be restricted to the early years of the operational period. The consultees similarly agree that there will be no significant landscape effects upon any of the LCAs, including the host LCA and LCAs located in the AONB.

NSC has requested that detailed landscape proposals are provided for some areas covered by the integrated /embedded landscape, visual and ecological mitigation masterplan that was included in the planning application. These are required to provide NSC with comfort about some aspects of the landscape assessment for the host LCA and a small number of visual receptor groups located to the immediate north of the airport.

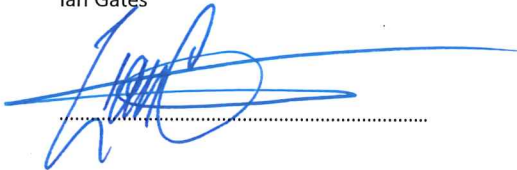
Although the planning application is an outline application in respect of the A38 highways works and the LVIA is acknowledged to be detailed and comprehensive by NSC, BAL has provided some detail design information for the works between the airport entrance and Potters Hill. This information includes a tree survey, tree loss and retention plans, and detailed landscape design drawings to give confidence about the feasibility of the integrated /embedded landscape, visual and ecological mitigation masterplan. These have been supplemented by a photomontage visualisation showing the worst case scenario for visual receptors located alongside the proposed A38 highway works. Analysis of the photomontage visualisation confirms the validity of the landscape and visual assessment for these receptors contained in the LVIA and its appendices.

BAL considers that where other detailed design information is requested to supplement the information set out in the integrated /embedded landscape, visual and ecological mitigation masterplan, this is best provided as part of the future submissions that will be required in respect of application pertaining to reserved matters as there is no dispute over the accuracy of the visual assessments for the receptors located close to the relevant sections of the airport boundary.

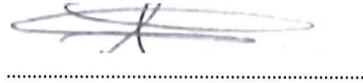
The consultees vary in their responses to the LVIA's conclusion that the proposed development will not have any significant adverse effects upon the Mendip Hills AONB (as defined by the 12 special qualities that are set out in its current Management Plan). NSC concurs with the conclusion of the LVIA, NE considers that effects upon tranquillity will result in adverse effects upon two tranquillity related special qualities and the AONB Partnership considers there will also be adverse effects upon a third special quality, views out of the AONB. Further information has been provided in response to comments regarding tranquillity impacts. This confirms that noise levels at the AONB are very low and that any increase in noise associated with increased aircraft movements would be extremely small (less than 1 dB(A)).

Issued by

Ian Gates

**Approved by**

Alex Melling

**Copyright and non-disclosure notice**

The contents and layout of this report are subject to copyright owned by Wood (© Wood Environment & Infrastructure Solutions UK Limited 2019) save to the extent that copyright has been legally assigned by us to another party or is used by Wood under licence. To the extent that we own the copyright in this report, it may not be copied or used without our prior written agreement for any purpose other than the purpose indicated in this report. The methodology (if any) contained in this report is provided to you in confidence and must not be disclosed or copied to third parties without the prior written agreement of Wood. Disclosure of that information may constitute an actionable breach of confidence or may otherwise prejudice our commercial interests. Any third party who obtains access to this report by any means will, in any event, be subject to the Third Party Disclaimer set out below.

Third party disclaimer

Any disclosure of this report to a third party is subject to this disclaimer. The report was prepared by Wood at the instruction of, and for use by, our client named on the front of the report. It does not in any way constitute advice to any third party who is able to access it by any means. Wood excludes to the fullest extent lawfully permitted all liability whatsoever for any loss or damage howsoever arising from reliance on the contents of this report. We do not however exclude our liability (if any) for personal injury or death resulting from our negligence, for fraud or any other matter in relation to which we cannot legally exclude liability.

Management systems

This document has been produced by Wood Environment & Infrastructure Solutions UK Limited in full compliance with the management systems, which have been certified to ISO 9001, ISO 14001 and OHSAS 18001 by LRQA.

Appendix A

Appendix A:

Technical note to accompany the photomontage visualisation of A38 works undertaken as part of proposed 12 mppa development

1.1 Overview

This appendix accompanies the photomontage visualisation and associated plan figure that have been produced to illustrate the highways design, civil engineering design, arboricultural survey and landscape design work that has been undertaken for the proposed highways work for the A38/Downside Road junction. This design work has been undertaken to provide additional information on this component of the proposed development at Bristol Airport that was requested by North Somerset Council (NSC) in their response to the Environmental Statement (ES).

1.2 Purpose of the Visualisation

The NSC response on landscape and visual issues¹ requested that further information be provided on the A38 highways works and it is understood that a visualisation was requested by NSC at the site meeting. The visualisation is required to illustrate the appearance of the proposed highways work; the impacts from the resultant loss of a number of trees close to the junction of A38 and Downside Road; and the appearance of the proposed detailed soft and hard boundary treatments that have been developed subsequent to the submission of the ES. Wood have determined that this requirement is most effectively met through the provision of a photomontage visualisation.

The photomontage visualisation has been produced in accordance with current best practice as set out Landscape Institute Advice Note 01/11². Baseline photography from a number of viewpoints close to the relevant section of A38 were taken in January 2019 using a suitable camera mounted on a tripod with an adjustable head. The final viewpoint selection was made to allow the photomontage visualisation to show the affected woodland, the revised junction, widened length of the A38 and the eastern boundary of the northern surface carpark within the horizontal angle of view of a single photographic frame (39.7 degrees). Photograph parameters are listed on the visualisation figure. The view is therefore representative of the views that are available to the range of visual receptors present in this area (who were categorised as a sub-group of visual receptors in Lulsgate Bottom in the visual assessment contained in Chapter 9 of the ES).

The photomontage visualisation shows the proposed A38 highways works and the proposed hard and soft boundary treatments at the first year of the operation of the A38 highways works. This time period was selected to illustrate the worst case scenario for visual receptors. It therefore accords with the overarching approach advocated in GLVIA3³ and adopted throughout the landscape and visual impact assessment (LVIA) in the ES. The period immediately after commencement of the operation of the reconfigured A38 is considered to be the worst case in landscape and visual terms. This is because the baseline vegetation will

¹ Dated 25.01.19

² Landscape Institute Advice Note 01/11 – Photography and photomontage in landscape and visual impact assessment

³ The Landscape Institute and Institute of Environmental Management and Assessment, (2013). Guidelines for Landscape and Visual Impact Assessment, 3rd edition, London, Routledge

have been removed in accordance with the relevant Johns Associates tree retention, removal and protection plan thereby potentially allowing views into the north-eastern part of the airport. However, the proposed boundary planting designed by Johns Associates will not yet have started to establish and fulfil its landscape and visual functions. A winter view is similarly a worst case scenario as the deciduous trees and shrubs are not in leaf and are less able to fulfil their screening functions.

The photomontage visualisation demonstrates that, as assessed in the LVIA, the proposed A38 highways works will not result in visual receptors in this part of Lulsgate Bottom (and those using the A38 southbound) gaining any additional views of the north-eastern part of the airport including the closest proposed components of the proposed development. Likewise, it demonstrates that there will not be any significant effects upon what the NSC response terms 'local' landscape character.

The photomontage visualisation is supported by a figure based upon aerial photography overlain with the results of the tree survey undertaken by Johns Associates and their subsequent tree retention, removal and protection plan that support the boundary planting proposals. This figure is used to show the extent of the tree removal and retention on the former quarry required to implement the highways design proposals. This figure also shows the location of the visualisation viewpoint.

1.3 Baseline View

The baseline view shows that the trees and scrub that have developed in the site of the former quarry at the junction of A38 and Downside Road, combine with planting in the gardens of Greenacre and High Lands and along the closest section of the northern boundary of the airport to provide effective screening of the car parking and built development in the northern area of the airport.

The cumulative vegetation cover provides an irregular naturalistic horizon in this south-western section of view. The current, poor condition, post and wire boundary fencing is a minor visual component. The planting has an unkempt appearance and the rising slope to the west of the A38 is not easily discernible.

1.4 Proposed View

The view of the operational proposed highways works has removed the ancillary highways elements such as traffic lights and signage. This has been undertaken to minimise visual clutter and allow a full understanding of the proposed landscape and visual changes. The removal of a number of trees and shrubs close to the footways along the A38 and Downside Road to accommodate the proposed widening of the A38 and revised junction will allow receptors' views to extend further into the woodland in the former quarry. Nevertheless, as confirmed by the aerial plan showing the vegetation to be removed, a large proportion of the existing vegetation will be retained. The retained vegetation will coalesce to continue to provide screening in combination with the vegetation in the gardens of High Lands and Greenacre and along the closest section of the Airport boundary which will be unchanged in comparison with the baseline. The result will be that the carparking and closest existing and proposed built components at the airport, including those proposed under the proposed development, will not be visible even in winter conditions.

The loss of the closest vegetation on the edge of the woodland will alter the composition of the horizon, reducing its height, although the prominent coniferous tree will be retained. At the beginning of the operation period the boundary fencing will be moderately visually prominent, and consideration will need to be given to the specification of a recessive colour scheme to reduce its visual role until the proposed native hedgerow and native woodland edge shrub planting on the slope becomes established. The northern-most of the extra heavy standard trees (Norway maples) to be planted in the eastern boundary of the northern carpark will be visible at the left hand end of the vegetated section of the view (above the cars on the visualisation).

The use of native species in the planting mixes, their specification as whips and transplants and the application of appropriate management, will encourage the establishment of the hedgerow and woodland edge planting. This will gradually reinforce the screening level shown in the photomontage visualisation and soften the appearance of the boundary fencing.

1.5 Review of Visual Impact Assessment Conclusions

The NSC response letter's penultimate paragraph under the heading of 'Visual Impacts' highlights the Council's concern about visual impacts sustained visual receptors in this part of Lulsgate Bottom. In the LVIA, the visual assessment contained in Table 9G.1 in Appendix 9G noted that for residents in the eastern Lulsgate Bottom sub-group, approximately six properties front onto this section of the A38. The visual assessment stated that these properties' residents will have close distance views of the widened section of the A38 and the revised junction. They would experience a medium magnitude of change during the construction period for the A38 highways works that would subsequently decrease to a low magnitude of change.

The photomontage visualisation illustrates the most open operation period views that could be available to the residential visual receptors in the eastern Lulsgate Bottom sub-group. Review of the change to the proposed view confirms that the assessment of a low magnitude of change in Table 9G.1 is correct. The fundamental composition of the view does not alter, with a limited adjustment to the relative proportions of carriageway surfacing and vegetation cover. The key consideration is that, even in winter, the temporary reduction in the amount of mature vegetation cover in the view will not result in visual receptors gaining filtered views of carparking or any existing or proposed built elements at the airport. As the proposed native hedgerow and native woodland edge planting become established and assumes a stronger visual role, the balance of the views will revert back to the baseline view and the visual role of the boundary fencing will decrease.

The second group of visual receptors who will experience the view shown in the visualisation are southbound vehicular receptors using the A38. These visual receptors were assessed in Table 9G.32 in Appendix 9G in the LVIA as experiencing a negligible magnitude of visual change taking into account the loss of some of the vegetation cover close to the junction of A38 and Downside Road. Review of the visualisation along with the planting proposals alongside the section of A38 routed close to the Airport's main entrance, confirms the assessment for this group of transient receptors

The NSC response, under the heading of A38 Airport Entrance to Potters Hill, notes that "*woodland management and replanting at the corner of the A38 and Downside Road will have some localised landscape and visual benefit, ...*" and emphasises the need for the detailed proposals to "*retain local character.*" The visualisation confirms that this assessment is correct and that this aspiration will be met, especially when the proposed native hedgerow and native woodland edge shrub planting becomes established.

1.6 Summary

Review of the NSC response on landscape and visual issues has noted NSC's concerns and observations on landscape, and especially visual effects, that would be generated by the proposed A38 highway works close to its junction with Downside Road. Notwithstanding that the detailed visual assessment contained in Appendix 9G did specifically consider the construction and operation of this component of the proposed development on the two relevant groups of visual receptors, Wood have worked with Johns Associates and c-tas to provide a photomontage visualisation to confirm the assessments in Appendix 9G.

The photomontage visualisation shows the widened section of A38, the revised levels and the revised junction layout at Downside Road. It has reviewed the tree retention, removal and protection plans supplied by Johns Associates to ensure that the necessary vegetation loss is accurately shown and a plan figure is attached to verify this review. The detailed soft landscape plans proposed by Johns Associates to develop

the Indicative Landscape, Visual and Ecological Mitigation Masterplan included in the planning application have been incorporated in the photomontage visualisation.

The photomontage visualisation shows that the conclusions of the visual assessment are valid. The visual impact of the loss of some of the vegetation cover close to the western edge of A38 and Downside Road will not result in visual receptors in this area having views of the carparking or the existing and proposed built components in the north-eastern part of the airport. This assessment applies to winter conditions at the start of the operation period which represents the worst case scenario. In summer months and as the proposed planting becomes established, the view will gradually resume the density of planting shown in the baseline view.

Issued by

Ian Gates

Approved by

Alex Melling

Copyright and non-disclosure notice

The contents and layout of this report are subject to copyright owned by Wood (© Wood Environment & Infrastructure Solutions UK Limited 2019) save to the extent that copyright has been legally assigned by us to another party or is used by Wood under licence. To the extent that we own the copyright in this report, it may not be copied or used without our prior written agreement for any purpose other than the purpose indicated in this report. The methodology (if any) contained in this report is provided to you in confidence and must not be disclosed or copied to third parties without the prior written agreement of Wood. Disclosure of that information may constitute an actionable breach of confidence or may otherwise prejudice our commercial interests. Any third party who obtains access to this report by any means will, in any event, be subject to the Third Party Disclaimer set out below.

Third party disclaimer

Any disclosure of this report to a third party is subject to this disclaimer. The report was prepared by Wood at the instruction of, and for use by, our client named on the front of the report. It does not in any way constitute advice to any third party who is able to access it by any means. Wood excludes to the fullest extent lawfully permitted all liability whatsoever for any loss or damage howsoever arising from reliance on the contents of this report. We do not however exclude our liability (if any) for personal injury or death resulting from our negligence, for fraud or any other matter in relation to which we cannot legally exclude liability.

Management systems

This document has been produced by Wood Environment & Infrastructure Solutions UK Limited in full compliance with the management systems, which have been certified to ISO 9001, ISO 14001 and OHSAS 18001 by LRQA.

Existing View



Proposed View



Photograph Parameters:

Horizontal field of view:	39.7°
Principal distance:	300mm
Paper size:	420mm x 297mm (A3)
Correct printed image size:	393 x 95mm
Camera:	Canon EOS 5D Mk III
Lens:	50mm
Camera height:	1.6m AGL
Date and time:	23/01/2018 11:50
Coordinates BNG:	351381,165666

Note: Correct Viewing Distance: 30cm when printed at A3.

Development of Bristol Airport to Accomodate 12 Million Passengers Per Annum

Photomontage visualisation showing baseline situation and proposed 12 mppa A38 highways works in view south-west from the junction of A38 and Downside Road

March 2019

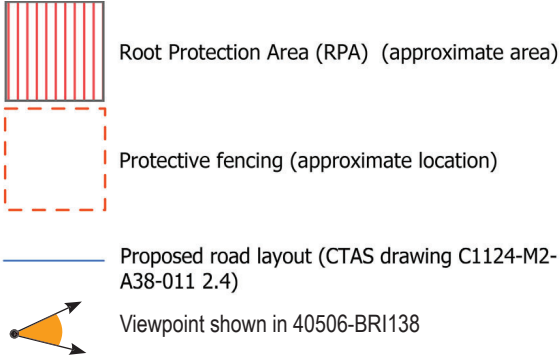
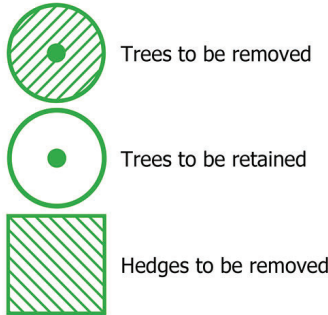


wood.

H:\Projects\40506 SUBFILE - main on Shrewsbury\Drawings\Design\40506-Bri139.indd Originator: Tristan Stephens



Aerial Photograph taken on June 19th 2017
Survey overlay J00382.TR2 Tree Retention, Removal and Protection Plan Sheet 2 of 3 Rev A
Johns Associates 04/03/2019



© Crown copyright. All rights reserved. Licence number AL100001776.

Development of Bristol Airport to Accomodate
12 Million Passengers Per Annum

**Aerial photograph of the junction of A38
and Downside Road showing existing tree
cover overlain with tree retention and
removal survey information.**

March 2019



wood.