Date: 21 June 2023

Registration identification no: 20039412

Our ref: 434394 Your ref: TR020001

The Planning Inspectorate
National Infrastructure Planning
Temple Quay House
2 The Square
Bristol, BS1 6PN

LutonAirport@planninginspectorate.gov.uk



Dear Jo Dowling

**NSIP Reference Name / Code: TR020001** 

# Natural England's comments in respect of London Luton Airport Expansion project promoted by Luton Rising

#### Examining authority's submission deadline 23 June 2023

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

For any further advice on this consultation please contact the case officer Alison Collins and copy to  $\underline{\text{consultations@naturalengland.org.uk}}$ .

Yours sincerely

Dr Alison Collins MCIEEM West Anglia Team



Customer Services Hornbeam House Crewe Business Park Electra Way Crewe Cheshire CW1 6GJ

T 0300 060 3900

#### **Natural England's Relevant Representations**

PART I: Summary and Conclusions of Natural England's advice.

PART II: Natural England's detailed advice (starting on page 8)

PART III: Natural England's detailed comments on the Development Consent Order (DCO) (starting on

page 11)

# **Summary of Natural England's Advice**

We require further information in order to evaluate the potential impacts arising from the application on the special qualities of the Chilterns AONB. We have requested additional information to verify the air quality impacts on nationally designated sites scoped in to the assessment; the applicant has recently provided us with further air quality analysis and we are currently reviewing this information with our specialists. We would like to see clarification of the information on best and most versatile soils; the applicant has recently provided us with further details and we are currently reviewing this with our specialists. We expect that these issues can be resolved satisfactorily. We have no major concerns with the mitigation strategies that have been provided for bats, badgers and, if required, Roman Snail. However, we are awaiting draft protected species licence applications for bats and badger in order to provide Letters of No Impediment. We have advisory comments on Biodiversity Net Gain and Green Infrastructure. We agree with the conclusions of the Habitats Regulations Assessment.

# Part I: Summary and Conclusions of Natural England's advice

- 1.1. Natural England's advice in these relevant representations is based on information submitted by London Luton Airport Limited in support of its application for a Development Consent Order ('DCO') in relation to London Luton Airport Expansion project ('the project').
- 1.2. Part I of these representations summarises what Natural England considers the main issues¹ to be in relation to the DCO application, and indicate the principal submissions that it wishes to make at this point. Natural England will develop these points further as appropriate during the examination process. It may have further or additional points to make, particularly if further information about the project becomes available.
- 1.3. Section 2 identifies the natural features relevant to this application. Section 3 summarises Natural England's overall view of the application and the main issues which it considers need to be addressed by the Secretary of State.
- 1.4. Part II of these representations sets out all the significant issues which remain outstanding, and which Natural England advises should be addressed by London Luton Airport Limited and the Examining Authority as part of the examination process in order to ensure that the project can properly be consented. These are primarily issues on which further information would be required in order to allow the Examining Authority properly to undertake its task or where further work is required to determine the effects of the project and/or to flesh out mitigation proposals and to consider compensation proposals to provide a sufficient degree of confidence as to their efficacy.

<sup>&</sup>lt;sup>1</sup> PINS NSIP Advice Note 11 Annex C sets out Natural England's role in infrastructure planning. <a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/10/PINS-Advice-Note-11">https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/10/PINS-Advice-Note-11</a> AnnexC 20150928.pdf

- 1.5. Our comments are set out against the following sub-headings which represent our key areas of remit:
  - Internationally designated sites
  - Nationally designated sites
  - Protected species
  - Biodiversity net gain
  - Nationally designated landscapes
  - Soils and best and most versatile agricultural land
  - Ancient woodland and ancient/veteran trees
  - Other valuable and sensitive habitats and species
  - Access and green infrastructure
- 1.6. Our comments are flagged as red, amber or green in Part II Table 1.

Red are those where there are <u>fundamental concerns</u> which it may not be possible to overcome in their current form.

Amber are those where <u>further information</u> is required to determine the effects of the project and allow the Examining Authority to properly undertake its task and or advise that further information is required on mitigation/compensation proposals in order to provide a sufficient degree of confidence as to their efficacy.

Green are those which have been <u>successfully resolved</u> (subject always to the appropriate requirements being adequately secured)

- 1.7. Natural England has attended Biodiversity Technical Working Group meetings to provide advice and guidance since 18 February 2020. However, we were not invited to attend other Working Groups, notably Landscape. Natural England has been working with Forestry Commission to provide coordinated advice.
- 1.8. A meeting was held with the applicant on 7 June 2023 to discuss the Statement of Common Ground.
- 1.9. Natural England will continue discussions with London Luton Airport Limited to seek to resolve these concerns and agree outstanding matters in a Statement of Common Ground. Failing satisfactory agreement, Natural England advises that the matters set out in section 4 will require consideration by the Examining Authority as part of the examination process.
- 1.10. The Examining Authority may wish to ensure that the matters set out in these relevant representations are addressed as part of the Examining Authority's first set of questions to ensure the provision of information early in the examination process.

# 2. The natural features potentially affected by this application

# Internationally designated sites

Our position regarding impacts on internationally designated sites is summarised below.

2.1. Natural England is satisfied that the proposed development is not likely to result in significant effects on the <u>Chilterns Beechwoods Special Area of Conservation (SAC)</u>. Due to the distance between the application site and the Chilterns Beechwoods SAC, there is unlikely to be a significant effect arising from air quality changes at the internationally designated site due to increased aircraft movements or vehicle emissions either alone or in combination with other

plans and projects. In addition, there are no other likely impact pathways to notified features, e.g. hydrological changes.

# Nationally designated sites

Natural England's position regarding nationally designated sites is summarised below.

2.2. Natural England agrees with the five Sites of Special Scientific Interest (SSSI) that have been screened into the air quality assessment, namely Dallow Downs and Winsdon Hill SSSI, Cowslip Meadow SSSI, Wain Wood SSSI, Galley and Warden Hills SSSI, and Smithcombe, Sharpenhoe and Sundon Hills SSSI. The first four sites are within 5km of the application site and may be affected by air quality changes from increased air traffic. Three of these sites are within 200m of the Affected Road Network, namely Dallow Downs and Winsdon Hill SSSI, Cowslip Meadows SSSI and Smithcombe, Sharpenhoe and Sundon Hills SSSI and may be affected by increased road traffic. The applicant has stated that they do not anticipate that the construction and operation of the Proposed Development will result in significant effects upon nationally designated sites from air quality changes. We have requested to see the detailed air quality analysis that has been carried out to determine operational air quality impacts arising from increased air and road traffic on the designated features of these sites in order to verify the assessment that has been carried out by the applicant. Further information has recently been supplied and we will review with our specialists in time for written representations.

# **Protected species**

Natural England's position regarding European protected species is summarised below.

2.3. Natural England has commented on the mitigation strategies for bats, badger and Roman Snail and has no major concerns. However, we are awaiting submission of draft protected species licence applications for review. As no draft protected licence applications have been submitted we are unable to issue Letters of No Impediment (LoNI) at this stage.

# **Biodiversity Net Gain**

Natural England's position regarding provision of Biodiversity Net Gain (BNG) is summarised below. Further detail on our reasoning for this is given in Part II.

- 2.4. As BNG is pre-mandatory, we are not able to require specific measures. However, there are some aspects of the BNG proposals that we wish to provide advice on.
- 2.5. Natural England's main area of concern relates to proposed habitats within the new open space provision. This specifically relates to the creation of other neutral grassland at "good condition". Where these habitats include public access, we would advise that the condition scores are downgraded to a more realistic condition. This is due to potential impacts from visitor pressure, differences in soil fertility, as well as uncertainties in the provision of seed sources/green hay and hydrology. Natural England requests further justification as to why the condition scores have been chosen, as well as more detail regarding measures to manage and mitigate impacts from visitors.

# Nationally designated landscapes

Natural England's position regarding nationally designated landscapes is summarised below. Further detail on our reasoning for this is given in Part II.

- 2.6. The Landscape and Visual Impact Assessment (LVIA) should be supported by an assessment of how the scheme, both in its construction and operational phases, would impact on the defined special qualities of the Chilterns Area of Outstanding Natural Beauty (AONB). These are presented in the AONB's statutory management plan. Natural England advises that a significant adverse impact on a special quality of the AONB would impact on the area's capacity to deliver its statutory purpose.
- 2.7. The applicant should address potential mitigation measures for any identified impacts on the AONB, including loss of tranquillity. Whilst alternatives may prove unworkable for air safety and practical operational reasons, the need to explore such potential mitigation measures is fully justified by the designation status of the Chilterns AONB.

#### Soils and best and most versatile agricultural land

Natural England's position regarding soils and the best and most versatile agricultural land is summarised below. Further detail on our reasoning for this is given in Part II.

- 2.8. We agree with the general conclusion that effects on best and most versatile (BMV) land would be moderate adverse (significant). However, we have requested further clarification of the points below; this has recently been supplied and we will review with our specialists in time for written representations.
- 2.9. We advise that the applicant should provide simple land take breakdowns for each phase and component. For example, total agricultural area impacted by scheme (split by scheme phase and by Agricultural Land Classification (ALC) grade), and total BMV agricultural area permanently and temporarily required for the development (split by phase).
- 2.10. A soil balance should be prepared to clearly identify the surplus of different soil types and identify opportunities for the sustainable re-use of this resource on site. We advise that the applicant should provide simple soil volume breakdowns for each phase and soil type. For example, total soil volume impacted by scheme (split by scheme phase and by soil type). The balance (soil re-use and surplus) should be consistent with the proposals set out in the outline Landscape and Biodiversity Management Plan (oLBMP).
- 2.11. The Soil Management Plan (SMP) needs to be clearer that the aim is for BMV agricultural land subject to temporary development or a change in land use, to be returned to, or retain, its original land quality.

#### Ancient woodland and ancient/veteran trees

Natural England's position regarding ancient woodland and ancient/veteran trees is summarised below.

2.12. Natural England and the Forestry Commission have produced <u>standing advice</u> for planning authorities in relation to ancient woodland and ancient/veteran trees. We note that ancient woodland habitats may be impacted by construction dust (where they are within 200m of the construction area) and subject to increased air pollution. We support the relevant representations made by Forestry Commission, including recommendations to plant a buffer strip between the car park and the Winchill Wood Ancient Woodland due to the potential for noise, light and dust pollution and measures to safeguard ancient woodland affected by works at the A1081 roundabout.

#### Other valuable and sensitive habitats and species

Natural England's position regarding County Wildlife Sites, priority habitats and species is summarised below.

- 2.13. We note that the development will result in almost the entire loss (93%) of Wigmore Park County Wildlife Site (CWS) and loss of habitat at Dairyborn Scarp District Wildlife Site (DWS) (20%) and Luton Parkway Verges DWS (37%).
- 2.14. Priority habitats and species are of particular importance for nature conservation and are included in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. There will be impacts on priority habitats and species, including arable field margins, lowland calcareous grassland, hedgerows, lowland mixed deciduous woodland and certain invertebrates (i.e. picture-winged fly, the set-aside downy-back beetle and the dingy skipper butterfly). We ask that representations from the local Wildlife Trust are taken into account with regard to these aspects.
- 2.15. We advise that representations from Environment Agency are taken into account for any water-dependant priority habitats and species that might be affected.

#### Access and green infrastructure

Natural England's position regarding access and green infrastructure (GI) is summarised below.

- 2.16. Natural England is aware of two large, proposed developments that are adjacent to the airport proposals. This includes Land to the East of Luton which has been allocated as a strategic housing site in Cockernhoe for 2,100 homes within North Hertfordshire District Council's Local Plan (Sites EL1, EL2 and EL3), as well as Land North East of Wandon End (Ref: 22/03231/FP) which is an application for a Solar Farm.
- 2.17. The Order Limits of the Airport proposals appear to overlap with the Solar Farm application and Natural England would therefore like to see more detail regarding the long-term management of proposed off-site hedgerow restoration. Currently there is uncertainty as to how this would be achieved.
- 2.18. Opportunities should be sought to link GI provision between these developments to maximise gains for people and nature, and improve connectivity. The design of the replacement open space provision should aim to improve connections with the wider landscape, as well as existing access routes such as the Chiltern Way, in particular oppritunities should be investigated to provide off road walking and cycling routes. Opportunities should be taken to reflect and / or enhance local landcape character, drawing on the baseline evidence and recommendations contained within the relevant Landscape Character Assessments (LCAs) and National Character Profile (NCA). Links to urban fringe areas should also be explored to strengthen access networks, reduce fragmentation, and promote wider green infrastructure.
- 2.19. Natural England's provides evidence-based advice and tools on how to design, deliver and manage green infrastructure (GI) and is a useful resource for informing GI provision within the proposals. GI should create and maintain green liveable places that enable people to experience and connect with nature, and that offer everyone, wherever they live, access to good quality parks, greenspaces, recreational, walking and cycling routes that are inclusive, safe, welcoming, well-managed and accessible for all. GI provision should enhance ecological networks, support ecosystems services and connect as a living network at local and regional scales.

2.20. Development should be designed to meet the Infrastructure Standards can be used to inform the quality, quantity and type of green infrastructure to be provided. The proposals should have a GI plan including a long-term delivery and management plan. Strong community engagement regarding the design of the replacement open space provision is also encouraged to maximise its value for the local community.

#### 3. Natural England's overall conclusions

3.1. The main issue raised by this application is the lack of information that we require in order for us to make an evaluation of the impact of the proposal on protected landscapes and designated sites in accordance with our statutory remit. We would like to see an assessment of the potential impacts on the special qualities of the Chilterns AONB and a consideration of possible mitigation measures for loss of tranquillity. We are currently reviewing further information regarding air quality impacts for nationally designated sites. We are currently reviewing further information on best and most versatile soils. We have some advisory notes on the assessment of Biodiversity Net Gain and Green Infrastructure. We are awaiting draft protected species licence applications for bats and badger in order to provide Letters of No Impediment.

# **Natural England's Relevant Representations**

# 4. Part II: Natural England's detailed advice

Part II of these representations expands upon the detail of all the significant issues ('red' and 'amber' issues) which, in our view remain outstanding and includes our advice on pathways to their resolution where possible. Part II also shows 'green' issues where a resolution has been reached and subject always to the appropriate requirements being adequately secured.

Natural England's advice is that there are a number of matters which have not been resolved satisfactorily as part of the pre-application process that must be addressed by London Luton Airport Limited and the Examining Authority as part of the examination and consenting process before development consent can be granted.

Natural England advises that, if approved, the project must be subject to all necessary and appropriate requirements which ensure that unacceptable environmental impacts either do not occur or are sufficiently mitigated.

Natural England will continue engaging with the applicant to seek to resolve outstanding concerns throughout the examination. Natural England advises that the matters indicated as 'red' and 'amber' will require consideration by the Examining Authority during the examination.

# Natural Englands Relevant Representations, Part II, Table 1

NE key issue ref	Topic	Issue summary (C) – construction phase (O) – operational phase	Further details about the project in order to enable assessment     Further evidence or assessment work required	NE comment on mechanism for securing resolution – e.g. mitigation/compensation	Matters that must be secured in the DCO (with DCO/DML or omission ref as applicable.	Risk Red/Amber /Green
	International designated sites	C/O	No further information required	N/A	N/A	Green
	National designated sites	0	We have requested to see the full calculation and assessment of impacts on designated sites scoped in to the assessment arising from air quality changes. Further information has recently been supplied.	Review of further information by our specialists and consideration of their advice		Amber
	Protected Species	С	Mitigation strategies for bats and badger have been agreed but draft licences are required to be provided by the applicant in order to provide a Letter of No Impediment (LONI)	Submission and review of draft licences for bats and badger	LONIs	Amber
	Biodiversity net gain		Advisory only; further clarification and justification for scoring within the metric is required			Amber
	National designated landscapes	0	The applicant should provide an assessment of the impact on the Chilterns AONB special qualities.	The production of an impact assessment which considers the impact of the development on	Agreed strategy for the implementation of any reasonably	Amber

		The applicant should consider what mitigation and/or compensatory measures are available for any identified impacts on the AONB's special qualities.	the relevant special qualities of the AONB. Mitigation measures should be considered and clarified.	practicable identified mitigation and monitoring measures.	
Soils and Best and Most Versatile Agricultural Land	C/O	The applicant should provide simple land take breakdowns for each phase and component. A soil balance should be prepared to clearly identify the surplus of different soil types and identify opportunities for the sustainable reuse of this resource on site. Further information has recently been provided.	Review of further information by our specialists and consideration of their advice.	Agreed Soil Management Plan	Amber
Ancient Woodland and Ancient/ Veteran Trees		Advisory only			Green
Other valuable and sensitive habitats and species		Advisory only			Green
Access and Green Infrastructure		Advisory only			Green

# Natural England's Relevant Representations PART III: Natural England's detailed comments on the Development Consent Order (DCO) and associated documents

# **Nationally designated sites**

- 4.1. Natural England is the government's adviser for the natural environment in England and the designating authority for Sites of Special Scientific Interest (SSSI).
- 4.2. Natural England agrees with the five Sites of Special Scientific Interest that have been screened into the air quality assessment, namely Dallow Downs and Winsdon Hill SSSI, Cowslip Meadow SSSI, Wain Wood SSSI, Galley and Warden Hills SSSI, and Smithcombe, Sharpenhoe and Sundon Hills SSSI. The first four sites are within 5km of the application site and may be affected by air quality changes from increased air traffic. Three of these sites are adjacent to the Affected Road Network (ARN), namely Dallow Downs and Winsdon Hill SSSI, Cowslip Meadows SSSI and Smithcombe, Sharpenhoe and Sundon Hills SSSI and may be affected by air quality changes from increased road traffic. We have requested to see the detailed air quality analysis that has been carried out to determine operational air quality impacts arising from increased air and road traffic on the designated features of these sites. We would like to see consideration of habitats within 200m of the ARN. We consider that the increased use of electric vehicles in future cannot be relied upon as mitigation as it is not definite. We are currently reviewing further information that has been provided to us.

## **Biodiversity Net Gain**

- 4.3. As Biodiversity Net Gain (BNG) is pre-mandatory, we are not able to require specific measures and defer to the responsible body for BNG. However, there are some aspects of the BNG proposals that we wish to provide advice on.
- 4.4. Natural England notes that the applicant is targeting a 10% biodiversity net gain for the proposals and this is welcomed. However, the Oxcam Arc Principles set out an aspiration for a 20% uplift for NSIPs. Therefore given the scale of the project, Natural England encourages the applicant to consider a more ambitious target that delivers significant gains for nature. We also note that habitats will be managed for 50 years, which is supported. We recommend consideration of a 60 year period for management as this would provide a potential opportunity for a second 30 year uplift for biodiversity net gain, provided additional enhancements were achievable. This could ensure longer-term management of habitats and greater gains for biodiversity.

- 4.5. Natural England's main area of concern relates to proposed habitats within the new open space provision. This specifically relates to the creation of other neutral grassland at "good condition". Where these habitats include public access, we would advise that the condition scores are downgraded to a more realistic condition. This is due to potential impacts from visitor pressure, differences in soil fertility, as well as uncertainties in the provision of seed sources/green hay and hydrology. Natural England requests further justification as to why the condition scores have been chosen, as well as more detail regarding measures to manage and mitigate impacts from visitors.
- 4.6. Natural England advises that the condition scoring for proposed woodland creation is reviewed and updated based on the following guidance in the Metric User Guide (Section 3.2.2 and 3.2.3).
  - 3.2.2. If woodland creation is required to compensate for the loss of high distinctiveness woodland, then:
  - a 'like for like' replacement must be provided and input into the metric
  - target habitat must replicate the woodland type that is being lost
  - lower distinctiveness woodland habitat types must not be used
  - a realistic target condition should be set (likely poor condition) Woodland creation
  - 3.2.3. If a woodland is being created, and is not replacing the loss of a high distinctiveness woodland, the newly created woodland should be input into the metric as either:
  - Woodland and forest 'other woodland; broadleaved' or
  - Woodland and forest 'other woodland; mixed' or
  - Woodland and forest 'other coniferous woodland'
- 4.7. We note that individual trees were not considered within the BNG calculations. The Urban Tree Calculator should be used to assess individual trees that do not contribute towards the definition of another broad habitat type (e.g. woodland) so that they are adequately factored into the overall assessment of net gain. Please refer to section 8.3 of the Metric User Guide for further information.
- 4.8. Natural England also advises that further detail is provided within the proposals to justify the following:
  - The process and reasoning for assigning "medium strategic significance" to relevant habitats.
  - Further detail regarding creation and enhancement measures for proposed habitats, and the reasoning behind the selection of either approach.
  - How the orchid translocation and the areas of high invertebrate interest have been accounted for within the BNG calculations.

- Clarity on the functionality of smaller habitat parcels. This should take into account guidance within the Metric User Guide (provided below).
- 4.9. Specific guidance from the Metric User Guide regarding smaller habitat parcels:
  - 'Principle 8 The metric does not enforce a minimum habitat size ratio for compensation of losses. However, proposals should aim to:
  - maintain habitat extent (supporting more, bigger, better and more joined up ecological networks) and
  - ensure that proposed or retained habitat parcels are of sufficient size for ecological function'

And:

'6.4.5. High and very high distinctiveness habitats have very specific environmental requirements to successfully establish. Assessors should prove how these requirements will be met when set as a target outcome in the metric. Evidence provided should include reference to: • habitat size'

And:

'6.4.7. Assessors should consider any limiting factors when selecting target habitat type and condition, including: • habitat size and fragmentation'

# Nationally designated landscapes

4.10. Natural England is the national landscape agency, the Government's advisor on landscape matters and the designating authority for National Parks and Areas of Outstanding Natural Beauty (AONBs). We only provide landscape related planning advice for proposed development schemes affecting designated landscapes. This includes schemes outside but within the settings of designated landscapes which may impact on the designated area itself and the delivery of its statutory purpose. As such, our landscape comments and concerns regarding this scheme relate to the Chiltern Hills AONB and its statutory purpose, which is to 'conserve and enhance the area's natural beauty'. The non-technical summary recognises that: 'The Chilterns Area of Outstanding Natural Beauty (AONB) is located approximately 3km north and 5km west of the airport. The existing airport is a prominent feature in views from much of the surrounding area and is also visible from long distance views from the Chilterns AONB'.

#### The scope of Natural England's landscape advice

- 4.11. We are unable to comment on specific, individual assessments of landscape and visual significance because we have not been involved in the preparation of the Landscape and Visual Impact Assessment (LVIA). Despite being a statutory consultee, we have not been included in workshops or other pre-application phase engagement exercises to understand how the assessment has progressed and mitigation measures identified, and to offer relevant advice. Having only been presented with a completed LVIA as part of the DCO submission, we have not carried out any site visits and do not now have the capacity to do so. Consequently, our comments and concerns are high level, pose questions which we believe will clarify matters for ourselves and the examining authority, and address how the AONB and its statutory purpose are dealt with by the LVIA.
- 4.12. Some of the issues we are able to raise at short notice may be answered by information contained in the LVIA or elsewhere in the ES, and which other pressures on our time have prevented us from uncovering.
- 4.13. We do recommend that any representations provided by the Chilterns Conservation Board (CCB) are given very careful consideration. The CCB is also a statutory consultee for Nationally Significant Infrastructure Projects so of course their advice carries statutory weight. We would however emphasise that the Board's advice is also backed by its statutory management plan for the AONB and detailed understanding the AONB's landscape character and special qualities and the vulnerability of those to internal and external land use changes. Consequently, their advice is essential to a fully informed determination of this scheme by the examining authority.

#### Assessing effects on the special qualities of the AONB

- 4.14. The LVIA should be supported by an assessment of how the scheme, both in its construction and operational phases, would impact on the defined special qualities of the AONB. These are presented in the AONB's statutory management plan. Natural England advises that a significant adverse impact on a special quality of the AONB would impact on the area's capacity to deliver its statutory purpose.
- 4.15. The special qualities most likely to be directly affected by this scheme are:
  - Relative tranquillity and peace on the doorstep of ten million people, one of the most accessible protected landscapes in Europe; relatively dark skies, of great value to human and wildlife health; unspoilt countryside, secret corners and a surprising sense of remoteness
  - Panoramic views from and across the escarpment interwoven with intimate dipslope valleys and rolling fields.

We cannot say definitively whether the other special qualities presented in the AONB management plan could be affected and the CCB may have a view on this.

#### The core LVIA methodology

4.16. The LVIA methodology correctly assigns a very high value to the AONB it only rates the sensitivity of receptors within the AONB as 'high' rather than very high. It would be helpful to have the process and application of professional judgement used to justify this separately explained, along with consideration of whether and how an increased sensitivity would affect any of the conclusions.

#### Increased air traffic over the AONB

- 4.17. We note that the LVIA identifies significant effects from increased air traffic over the designated landscape for the operational phase of the scheme, but that no mitigation is proposed. The table on page 22 of document 5.02 Appendix 14.4 Detailed Landscape Impact, identifies a moderate adverse (which is rated significant) residual effect from aircraft movements on the aesthetic or perceptual characteristics of the landscape within the Chilterns AONB.
- 4.18. We appreciate that landscape consultants are not necessarily able to consider and model alternative uses of airspace across the AONB (and therefore more widely across the east and south-east of England) to relieve pressure on the AONB. This is, however, a potential mitigation measure which the applicant should be required to address. Whilst alternatives may prove unworkable for air safety and practical operational reasons the need to explore such potential mitigation measures is fully justified by the designation status of the Chilterns AONB.
- 4.19. In relation to air traffic, we would like to know on what basis a flight level of below 7,000 ft above mean sea level has been selected for considering effects on tranquillity within the Chilterns AONB.

#### **Road traffic impacts**

4.20. Increased road traffic generated by the airport expansion scheme could lead to an increase of traffic on minor roads in nearby parts of the AONB. This could be local traffic and drivers 'in the know' displaced onto more minor routes and using rat runs to escape more heavily trafficked main roads. This displaced traffic could impact on the relative tranquillity of the AONB and create pressures for more road signage, lighting, kerbing and other interventions to enable those minor lanes to carry that traffic safely. That road engineering would alter the character of those lanes and the character of the landscapes they sit within. It would be helpful to know whether this scenario has been considered by the applicant and their consultants.

#### **Chilterns AONB Boundary Review**

4.21. The proposed NSIP is located within a proposed area of search which Natural England is considering as a possible boundary variation to the Chilterns Area of Outstanding Natural Beauty (AONB). Although the assessment process does not confer any additional planning protection, the impact of the proposal on the natural beauty of this area may be a relevant matter in the determination of the development proposal. Natural England considers the Chilterns to be a valued landscape in line with paragraph 174 of the National Planning Policy Framework (NPPF). Furthermore, paragraph 176 of the NPPF states that development in the settings of AONBs should be sensitively located and designed to avoid or minimise impacts on the designated areas. An assessment of the landscape and visual impacts of the proposal on this

area should be undertaken, with opportunities taken to avoid or minimise impacts on the landscape and secure enhancement opportunities. Any infrastructure development should reflect or enhance the intrinsic character and natural beauty of the area and be in line with relevant National Policy Statements and development plan policies.

4.22. An extension to an existing AONB is formally designated once a Variation Order, made by Natural England, is confirmed by the Defra Secretary of State. Following the issue of the designation order by Natural England, but prior to confirmation by the Secretary of State, any area that is subject to a Variation Order would carry great weight in decisions on planning and infrastructure proposals. For more information about the boundary review process, please read these

# Soils and best and most versatile agricultural land

- 4.23. Natural England is the statutory body for applications affecting more than 20 ha of BMV land. Based on the information provided with the Luton Airport Expansion application, it appears that the proposed development comprises approximately 120.0 of agricultural land within the Main Application Site, including 57.6 ha classified as best and most versatile (BMV) (Grades 1, 2 and 3a land in the Agricultural Land Classification (ALC) system). There is a further 360 ha of non-agricultural land with the Main Application Site. There is an additional 0.6 ha of agricultural land within the Off-Site Highways that will be impacted by the proposed development.
- 4.24. The ALC figures for the Main Application Site have been derived from a combination of site-specific ALC and Soil Resource Surveys, and Post-1988 ALC surveys. The ALC figures for the Off-Site Highways Area have been derived from Provisional ALC mapping, assuming all mapped Grade 3 is Subgrade 3a. Assuming that the Provisionally mapped ALC Grade 3 land is BMV makes it impossible to provide an accurate baseline and demonstrate the likely potential impacts. So, whilst this may make the mitigation precautionary, it means that the project is unable to show how it avoids impacts to BMV soils nor the design of potential mitigation to safeguard the soil resources.
- 4.25. The proposals set out that of the 57.6 ha of BMV agricultural land, 5.1 ha will be permanently developed; and a further 27 ha will be subject to land use change to woodland or scrub and assessed as a permanent loss of agricultural land in Phase 1. In Phase 2a, a further 17.6 ha of BMV land will be permanently developed. As a result, 22.7 ha of BMV would be irreversibly lost as a result of permanent land take and a further 27 ha being taken out of agricultural use for forestry.

#### **Agricultural Land Quality and Farm Holdings**

4.26. In addition to the permanent land use change, a further 28.5 ha (27 and 1.5 ha in Phase 1 and 2a, respectively) of BMV land will be subject to a change from intensive agricultural to less-intensive grassland and assessed as a temporary loss of agricultural land. Chapter 6 states that the soil profiles to be permanently converted from arable production to neutral grassland/neutral meadow grassland will remain intact and their physical properties, including ALC Grade will be unchanged. We advise that the applicant should provide simple land take breakdowns

- for each phase and component. For example, total agricultural area impacted by scheme (split by scheme phase and by ALC grade), and total BMV agricultural area permanently and temporarily required for the development (split by phase).
- 4.27. The assessment provided in Chapter 6 takes account of loss of BMV and impact to the soil resources from a soil resilience perspective. We agree with the general conclusion that effects on BMV would be moderate adverse (significant). Natural England recommends that the agricultural land and soils are assessed in line with the IEMA (2021) Guidelines: 'A New Perspective on Land and Soil in Environmental Impact Assessment' (2022). The soil assessment should be updated following correction for site specific soil horizon depths (topsoil and subsoil).
- 4.28. Soil volumes presented in Chapter 6 are based on a 25 cm depth of topsoil and 25 cm depth of subsoil. Soil depths should be informed by the site specific soil resource surveys presented in Appendices 6.2 6.5, and subsoils would be expected to be deeper than 25 cm. The soil profile specifications are discussed in Appendix 8.2 Outline Landscape and Biodiversity Management Plan (oLBMP). A soil balance should be prepared and presented to clearly identify the surplus of different soil types and identify opportunities for the sustainable re-use of this resource on site. We advise that the applicant should provide simple soil volume breakdowns for each phase and soil type. For example, total soil volume impacted by scheme (split by scheme phase and by soil type). The balance (soil re-use and surplus) should be consistent with the proposals set out in the oLBMP. Natural England welcomes that Soil Resource Surveys have been undertaken across the site. This site specific information should inform the soil and agricultural land EIA presented in Chapter 6, split by Phase, soil type and soil horizon (topsoil / subsoil). We have requested further information from the applicant and we are currently reviewing this with specialists.

#### **Outline Soil Management Plan**

- 4.29. Soil is a finite resource which plays an essential role within sustainable ecosystems, performing an array of functions supporting a range of ecosystem services, including storage of carbon, the infiltration and transport of water, nutrient cycling, and provision of food. It is recognised that a proportion of the agricultural land will experience temporary land loss. In order to both retain the long term potential of this land and to safeguard all soil resources as part of the overall sustainability of the whole development (during construction and decommissioning), it is important that the soil is able to retain as many of its many important functions and services (ecosystem services) as possible through careful soil management and appropriate soil use, with consideration on how any adverse impacts on soils can be avoided or minimised.
- 4.30. Natural England welcomes the preparation of an Outline Soil Management Plan (oSMP) with reference made to the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Natural England also welcome that a detailed Soil Management Plan will be produced by the Contractor post consent as secured through Development Consent Order (DCO), which will be in accordance with the oSMP. The SMP needs to be clearer that the aim is for BMV agricultural land subject to temporary development or a change in land use, will to be returned to, or retain, its original land quality. For example, this could be actioned by a target specification for the restored soils according to location and soil types, end use and required ALC grade. In addition to the target specification, a monitoring and aftercare plan should be detailed to confirm the target ALC grade is achieved, or retained, to ensure no loss of BMV land. Given the fine texture of the topsoil (clay and silt), the loose-tipping method is the preferred method for soil handling so to minimise any damage to the soil resource. To

avoid risk of soil damage and compaction, bulldozers should not normally be employed for soil stripping or replacement for soils being reused. Soil stockpiles should not exceed 3m in height for topsoils and 5m for subsoils. Although it is sensible to include the reconditioning methodology and the separate handling and storage methodology of soils which may be plastic, every effort should be made to avoid this scenario. Decompaction must be undertaken when the soils are dry and friable (Section 5.11). The target specification for the restored soils for each intended end-use should be clearly set out in the oSMP, with required soil volumes.

4.31. We advise that if the development proceeds, the developer uses an appropriately experienced soil specialist to advise on, and supervise, soil handling, including identifying when soils are dry enough to be handled and how to make the best use of the different soils on site. All soils should only be handled in a dry and friable condition, and it is expected that soil handling will be confined to the drier summer period to minimise risk of soil damage (April through September). Soil handling methods should normally be as specified as in the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (including accompanying Toolbox Talks).