

## **TR020001 Luton Airport Expansion**

### **Summary of Written Representations prepared by The National Trust for Places of Historic Interest or Natural Beauty (reference number 20040696)**

Our written representations expand on our relevant representation (RR-1077) and are informed by technical advice provided by HaskoningDHV UK in relation to the noise impact and air pollution likely to be caused by the proposed development.

**Noise Pollution** - We maintain our objection to the impact that the proposals would have upon tranquillity at our sites. Where an adverse impact is identified on National Trust sites, such as the increase in overflights at Ashridge Estate, consideration should be made in respect of whether the proposals are appropriate and whether there is the need for mitigation. We are therefore of the view that the National Trust sites identified in this Written Representation should be thoroughly considered by the Examining Authority in their assessment of the development proposals in respect of the noise impact of the development on tranquillity at these sites.

**Air Pollution** - Given the distance between the airport and National Trust sites identified in this Written Representation, we accept that it is unlikely that there would be an impact on ecological designations through air quality emissions.

We would invite the Examining Authority to undertake site visits, accompanied or otherwise, to locations with Ashridge Estate (including Ivinghoe Beacon), Whipsnade Heath and Dunstable Downs to assess the current noise impact of the airport in its existing operation and to consider the impact that the increase in overflights at these locations would have upon the relative tranquillity of these sites.



**National  
Trust**

██████████@nationaltrust.org.uk  
Direct line: ██████████  
22nd August 2023

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

By email: LutonAirport@Planninginspectorate.gov.uk

Dear Sir,

**TR020001 Luton Airport Expansion  
Procedural Deadline 1 Submission: Written Representation**

This Written Representation is made on behalf of The National Trust for Places of Historic Interest or Natural Beauty (“the Trust”) (reference number 20040696).

As set out in our Relevant Representation (RR-1077), the Trust’s principal landholdings affected by this application proposal include the following properties:

- Ashridge Estate and Ivinghoe Beacon
- Dunstable Downs
- Chilterns Gateway
- Whipsnade Estate – Whipsnade Heath, Tree Cathedral, Coombe Hill, Low Scrubs Pulpit Hill
- Smithcombe, Sharpenhoe and Sundon Hills SSSI
- Totternhoe Knolls SSSI.

The largest of these is the Ashridge Estate which comprises some 5000 acres of countryside, including ancient woodlands and commons. Dunstable Downs is the highest point in Bedfordshire and Dunstable and Whipsnade Downs, Ivinghoe Hills, Ashridge Commons and Woods are all designated SSSIs and all five landholdings lie within the Chilterns AONB. Ashridge Estate also includes Pitstone Hill, Alpine Meadow and Little Heath Pit SSSIs. Parts of both Coombe Hill and Pulpit Hill are also designated SSSIs. A large part of the Ashridge Estate is also part of the designated Chilterns Beechwoods SAC. These sites in the context of the DCO proposal are identified within the map provided at Appendix 1 of this document.

National Trust Office  
Roundhouse  
1 Sheepcote Street  
Birmingham  
B16 8AE  
www.nationaltrust.org.uk

Chair of the Regional Committee: Carys Swanwick  
Director for the Midlands & East of England: Paul Forecast  
Registered office:  
Heelis, Kemble Drive, Swindon  
Wiltshire SN2 2NA  
Registered charity number 205846

Together, these special places offer access to miles of footpaths with expansive views across the Vale of Aylesbury and are home to sensitive and rare species of flora and fauna. The Trust is committed to the protection of these spaces, and to the quality of experience they offer to visitors. The Trust has a duty to protect and care for special places so people, nature and culture can thrive.

This Written Representation expands on, and updates our position on the issues raised in our Relevant Representation (RR-1077), namely:

- The impact of the noise pollution caused by the DCO proposals on the tranquillity of the National Trust sites within the vicinity of the proposed airport expansion; and
- The impact of the air pollution caused by the DCO proposals on the condition of the ecologically important and designated sites located within the vicinity of the proposed airport expansion.

These written representations are informed by technical advice provided by HaskoningDHV UK in relation to the noise impact and air pollution likely to be caused by the proposed development.

#### **Summary of the National Trust's position**

- National Trust landholdings have not been included in the noise assessment submitted by the Applicant. We would request clarification on what review was done to scope out these National Trust landholdings.
- The Trust object on the grounds of a likely increase in noise experienced at our landholdings resulting from an increased frequency of operational aircraft overflying these sites (listed above).
- The Trust are satisfied with the scope of sites considered for Air Quality despite this scope not following typical/best practice Zone of Influence.

## **Noise Impact**

### *Introduction*

In our Relevant Representation, we expressed our concerns that the existing noise impact at our landholdings would be exacerbated through the development as a result of an increased number of planes using the flight path which passes over these sites at 7,000ft and below. There is often audible air noise from aircraft within the National Trust sites and it is noted that the Examining Authority (Planning Inspectorate) undertook a number of unaccompanied site visits in late May to include visits to Ashridge Estate and Ivinghoe Beacon where air noise was noted (EV1-001).

The National Trust has taken advice from HaskoningDHV UK in respect of the Applicant's approach to the Trust's sites in their assessment of the proposed development, particularly in respect of noise impact on these sites.

Cont/d

### *Sensitive Receptors*

The National Trust sites identified in the list above qualify as sensitive receptors (or contain sensitive assets/receptors) for these related assessments (e.g. sites, buildings and monuments listed and/or scheduled or non designated assets of value/importance for their heritage and archaeological interest) and/or may contain valuable habitat for sensitive receptors (e.g. SSSIs for biodiversity). We are advised that the noise assessment and the associated Environmental Statement (ES) undertaken by the applicant, do not include these National Trust sites (listed above) in the monitoring and assessment despite their qualification as sensitive receptors. Whilst the advice provided by Royal Haskoning has confirmed that the noise associated with operations located at the airport (earthworks and construction, operational ground movements and fixed plant) would be imperceptible at these sites, there is already an existing impact at these sites from air noise, and this concern has not clearly been included by the Applicant in their assessment, and as such, the cumulative effect is not assessed. Clarity is therefore required from the Applicant on whether or not National Trust sites were included in the non-residential receptors within the noise assessment for air noise and, if they were, the noise level criteria which were applied, and an assessment of the cumulative impacts presented.

Paragraph 16.9.3 of the ES Chapter states that it “provides an assessment of noise effects on people, primarily where they live (‘residential receptors’) in terms of individual households, nursing homes and care homes and on a wider community basis. This includes any shared community open areas (e.g. parks) as well as private open space (e.g. gardens). Assessment of these receptors also includes consideration of ‘relative tranquillity’ (see methodology in Section 16.5). The chapter also contains an assessment of noise effects on non-residential receptors.” The National Trust sites could be considered to comprise “shared community open areas”, given the Trust’s charitable purpose to look after countryside and green spaces, ensuring everyone benefits. The reviewed documentation does not identify all community receptors in the study area, nor does it give any further definition; hence it has not been possible to identify whether National Trust sites were considered to be “shared community open areas”. We would appreciate clarification on this point from the Applicant. We have also reviewed the Cultural Heritage chapter of the ES on the grounds that National Trust sites may be classified as heritage assets in assessing the impact of noise on the landholdings listed above, however we understand that this relates predominantly to above- and below-ground heritage. Accordingly, the sites that we are concerned will be impacted by the development have been excluded from assessment in respect of noise impact within the ES.

### *Air Noise*

We are of the view that the only potential noise and vibration impact from the development which has the potential to affect National Trust sites is operational air noise (i.e. the noise of aircraft).

Paragraph 16.3.9 of the ES Chapter on Noise defines the air noise study area, which is the area over which aircraft noise level predictions have been undertaken, as follows: “The study area for air noise has been defined based on guidance within Air Navigation Guidance, which states: “Below 4,000 feet, there is a strong likelihood that aircraft could create levels of noise exposure above the LOAELs identified above, which is reflected in the Altitude Based  
Cont/d

Priorities". In addition, the largest of the baseline and Do-Something (defined in paragraph 16.5.48) daytime and night-time LOAEL air noise contours across all assessment scenarios have been used to define extents of the air noise study area. The Air Noise Study Area is illustrated in Figure 16.1 of this ES [TR020001/APP/5.03]."

The above quote refers to the Lowest Observed Adverse Effect Level (LOAEL), which is a term adopted from the Noise Policy Statement for England (NPSE) and is defined as "the level of noise exposure above which adverse effects on health and quality of life can be detected". The LOAELs for operational air noise are taken from the Air Navigation Guidance (Department for Transport, 2017) and are 51dB LAeq,16h for daytime noise. This is adopted from research into the health-related effects of aircraft noise undertaken by the UK Civil Aviation Authority (CAA) (Survey of Noise Attitudes 2014: Aircraft Noise and Annoyance, Second Edition). This survey showed that annoyance-related adverse effects can occur down to levels of around 51 dB LAeq. Whilst the LOAEL is appropriate to use for assessment with relation to the objectives of the NPSE, it may not capture the potential for all adverse effects on National Trust sites, as these are not necessarily health-related, but defined as a potential disturbance of setting, including tranquillity where relevant.

### *Tranquillity*

As set out within our Relevant Representations, our key noise concern relates to impact on tranquillity of the special places that we look after. The National Planning Policy Framework requires that tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason should be protected. UK Government's National Planning Practice Guidance states at paragraph: 008 Reference ID: 30-008-20190722 that "For an area to justify being protected for its tranquillity, it is likely to be relatively undisturbed by noise from human sources that undermine the intrinsic character of the area. It may, for example, provide a sense of peace and quiet or a positive soundscape where natural sounds such as birdsong or flowing water are more prominent than background noise, e.g., from transport." We consider that the National Trust sites listed above fall within the tranquillity definition in the NPPG and the noise assessment should submitted in support of the proposals should be .

There is currently no method for assessing noise impacts on tranquillity which could be considered as accepted best practice, but it is widely accepted that tranquil soundscapes are likely to be relatively undisturbed by noise from man-made sources, that lower levels of sound are likely to be important and that natural sounds are likely to be beneficial. Whilst the National Trust sites listed above are already affected by aircraft noise from Luton Airport as planes overfly the sites, our concern is that the Luton Airport proposals shouldn't result in any greater aircraft noise impact on National Trust sites than that experienced at present.

In order to address the requirements of the NPPF, Section 16.5 of the ES Chapter includes a discussion on tranquillity. It notes that the development would only result in changes to an existing source in the ambient sound climate, due to changes in numbers of aircraft movements, but would not result in any new areas affected by aircraft noise. Hence, the assessment is restricted to consideration of relative tranquillity, which uses absolute noise level criteria and noise level change, rather than fundamental changes to the noise sources

Cont/d

affecting the soundscape. However, it is not apparent that the LOAEL and SOAEL thresholds adopted for the assessments of effects on residential and non-residential receptors are appropriate for the assessment of relative tranquillity. Indeed, by its very nature, tranquillity must be considered potentially present at lower absolute noise level thresholds than those for the onset of annoyance related effects. It is considered that, at noise level thresholds below the LOAEL, relative tranquillity at National Trust sites could be affected by changes in aircraft noise levels, and the assessment has not identified the potential for these effects to occur. Absolute criteria are used which are considered potentially inappropriate for the assessment of the potential for the Project to impact the tranquillity of National Trust sites.

### *Noise Assessment*

The baseline conditions as set out in the ES in relation to the air noise assessment were defined by a combination of noise monitoring and modelling. Modelling was undertaken across the entire air noise study area; whereas, by necessity, monitoring was undertaken at specific locations, as shown in Figure 16.3 of the ES. These monitoring locations (ML) were also used as receptors (AR) for reporting the assessment of noise-related effects. Analysis of this figure shows that the closest monitoring locations/receptors to the National Trust sites are AR8 / ML8 in Dagnall (near Dunstable Downs & Whipsnade Cathedral), AR22 / ML22 in Holywell (near Whipsnade Heath) and AR30/ML30 in Pitstone (inside the north west area of Ashridge Estate). It is understood that the ES air noise assessment used measured noise level data from the Luton Airport monitoring locations to validate and adjust the predicted aircraft noise levels. We have been advised by our technical consultants that there are some discrepancies in the predicted sound exposure levels and maximum sound levels (LASmax) at the monitoring locations generated through the modelling. It is recommended that the Applicant should clarify whether the adjustments to the predictions are correct and if not, the modelling of LASmax values may need to be redone. Generally, it appears that the predictions would therefore have been more accurate if separate corrections had been made for each runway. The Applicant should clarify why this was not done.

The air noise assessment compares the predicted Do Something and Do Minimum noise levels in three assessment years. This is considered a short-term impact, in that the assessment is undertaken for a snapshot in time with a theoretical “without Project” scenario. It is considered that this does not consider the actual effects of the Project, which will be observed as a gradual change in noise levels over time. We consider that the Applicant should explain the reason that the impact of noise level changes in the long-term were not assessed, as surely the noise impact would be over the lifetime of the operation of the expanded airport, notwithstanding anticipated technological advances in air traffic noise.

The results of the noise assessment contained within the ES demonstrate that the overflight contours show that there are 20-50 overflights per day over the Whipsnade Heath site, the southern end of Dunstable Downs & Whipsnade Cathedral and the northern end of Ashridge Estate in the DM scenario and 2027 and 2039 DS scenarios. However, in the 2043 DS scenario, this metric increases to 50 to 100 overflights per day. Based on the noise monitoring results at sites close to or within National Trust sites set out within the noise assessment submitted by the Applicant, the increase in number of overflights is considered potentially

Cont/d

noticeable to visitors to Ashridge Estate in terms of the increase in frequency of air noise, and accordingly would be likely diminish tranquillity at the site.

### *Conclusion*

Based on the above, there are shortcomings in the noise assessment, which casts doubt on the validity of its findings and leaves open the possibility that tranquillity could be adversely affected by the forecast increase in aircraft overflying National Trust sites, specifically Ashridge Estate, Dunstable Downs and Whipsnade Heath. The Trust maintains its objection to the impact that the proposals would have upon tranquillity. Whilst reference is made throughout the application to aeronautical technology advances which would mitigate any noise impact, these are theoretical and an assessment of the proposals in respect of existing noise levels should be undertaken.

Where an adverse impact is identified on National Trust sites, such as the increase in overflights at Ashridge Estate, consideration should be made in respect of whether the proposals are appropriate and whether there is the need for mitigation. We are therefore of the view that the National Trust sites identified in this Written Representation should be thoroughly assessed by the Examining Authority in their consideration of the development proposals in respect of the noise impact of the development on tranquillity at these sites. It is considered that there is a need for noise monitoring at locations within Ashridge Estate, Whipsnade Estate and Dunstable Downs, to establish the impact of the expansion and identify any necessary mitigation required.

We would invite the Examining Authority to undertake site visits, accompanied or otherwise, to locations with Ashridge Estate (including Ivinghoe Beacon), Whipsnade Heath and Dunstable Downs to consider the current noise impact of the airport in its existing operation and to assess the impact that the increase in overflights at these locations would have upon the relative tranquillity of these sites.

### **Air Pollution**

In our Relevant Representation, we expressed our concerns that without the Applicant assessing the full complement of sites to include the National Trust sites identified in the list above in relation to routes to the Airport Access Road (AAR), it is not clear what the resultant effect of the proposed development would be. By omitting these sites, it may result in traffic being redirected towards routes in closer proximity to ecologically important designated sites which are sensitive to vehicle emissions, and this could have an adverse impact on these designations.

The Trust has since taken advice from HaskoningDHV UK in respect of the Applicant's approach to the Trust's sites in their assessment of the proposed development, particularly in respect of air quality impact on important ecological designations within the National Trust's care. Their review of the Air Quality chapter of the ES concluded that whilst there are some discrepancies in the methodology (in respect of the Zone of Influence considered), given the distance of the National Trust sites to the (AAR), there are forecast to be no likely significant air quality effects at these National Trust sites. It has also been demonstrated that emissions

Cont/d

of air pollutants from aircraft engines at altitudes above ground of 1,000 feet (305 metres) do not result in significant effects at ground level. Given the distance between the airport and National Trust sites identified in this Written Representation, we accept that it is unlikely that there would be an impact on sites subject to ecological designations through air quality emissions.

These written representations set out the National Trust's position based on the information available. We would welcome the opportunity to consider further information provided by the Applicant which could clarify some of the queries raised in this representation, and to identify if there are any possible mitigation measures which would address our concerns regarding the likely anticipated impact on tranquillity at our sites.

Yours sincerely



Claudia Clemente BSc (Hons) MA MRTPI  
Planning Adviser (Midlands)

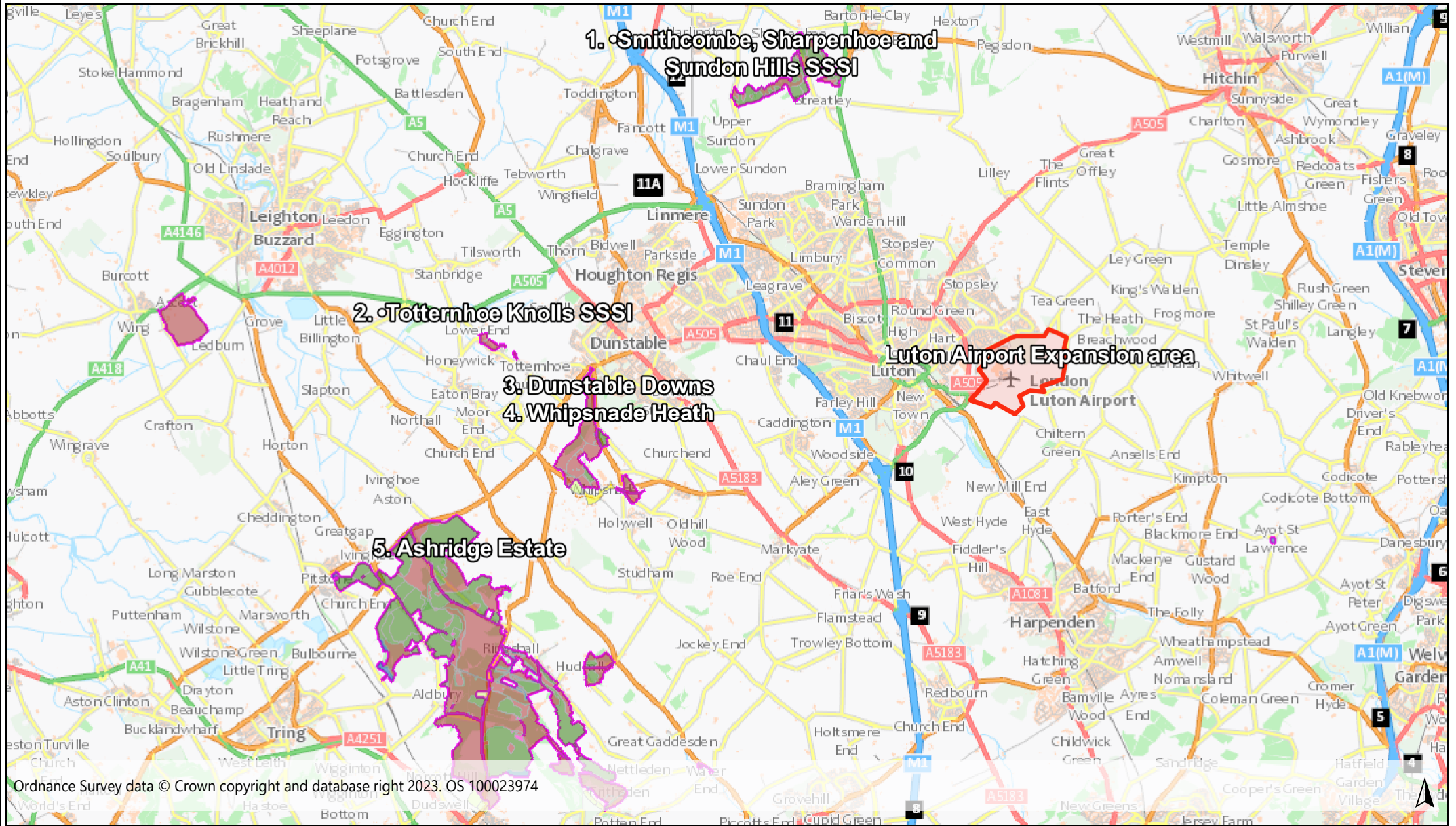
Encs.

Cont/d

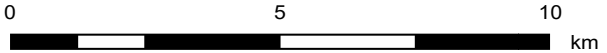




# National Trust | NT sites within 15km of Luton Airport Expansion



Ordnance Survey data © Crown copyright and database right 2023. OS 100023974



Scale 1: 140000 (when printed at 100% on A4 landscape)

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Notes