

June 2023

# London Luton Airport Expansion

Planning Inspectorate Scheme Ref: TR020001

Volume 5 Environmental Statement and Related Documents  
**5.03 Chapter 16 Noise and Vibration Figures 16.57 - 16.62**

Application Document Ref: TR020001/APP/5.03  
APFP Regulation: 5(2)(a)

**The Planning Act 2008**

**The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009**

**London Luton Airport Expansion Development Consent Order 202x**

---

**5.03 ENVIRONMENTAL STATEMENT CHAPTER 16 NOISE AND VIBRATION FIGURES 16.57 – 16.62**

---

<b>Regulation number:</b>	Regulation 5(2)(a)
<b>Planning Inspectorate Scheme Reference:</b>	TR020001
<b>Document Reference:</b>	TR020001/APP/5.03
<b>Author:</b>	Luton Rising

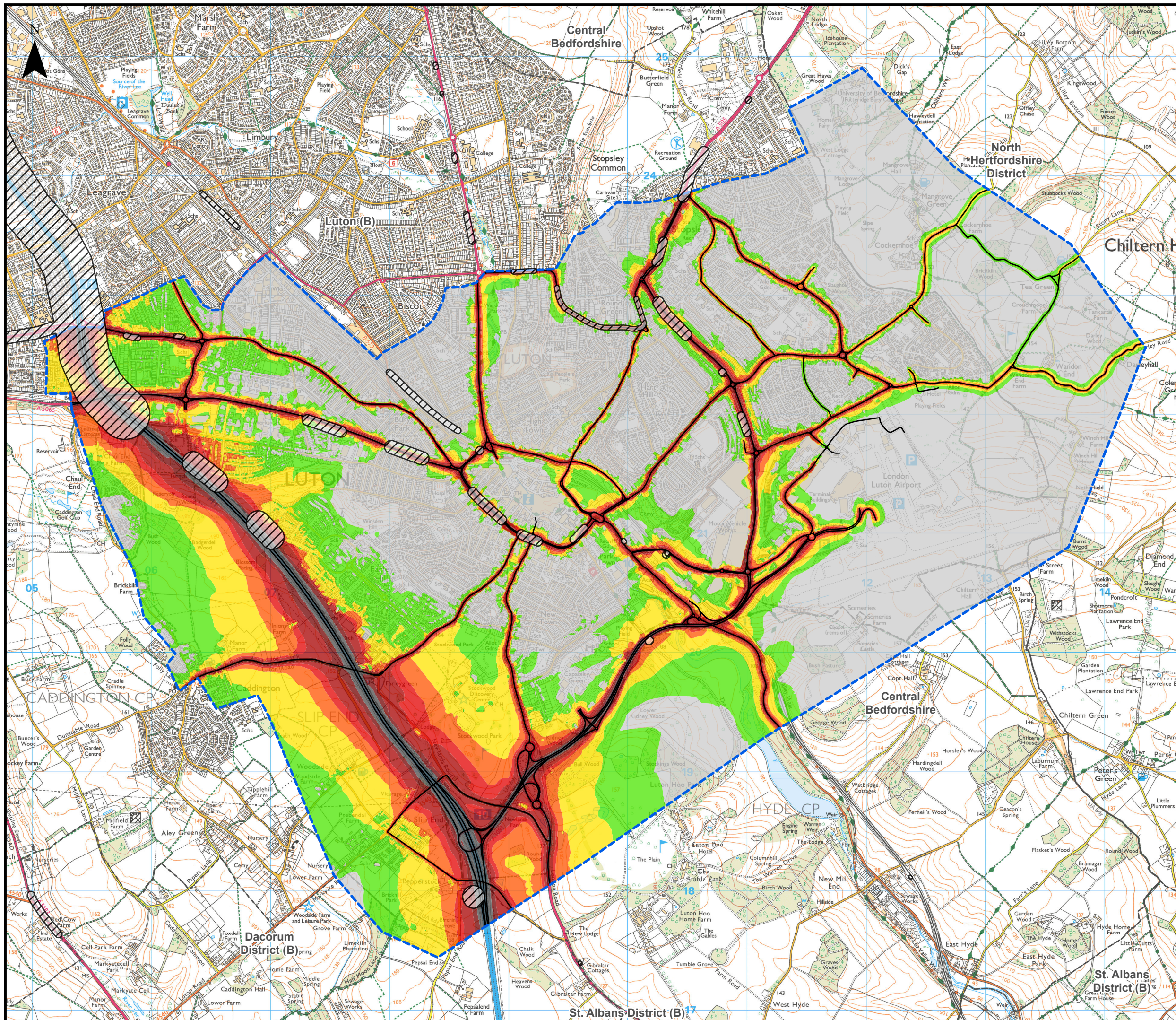
<b>Version</b>	<b>Date</b>	<b>Status of Version</b>
Issue 01	February 2023	Application issue
Revision 01	June 2023	Additional submissions (updated in response to Rule 9 letter)

## Contents

---

Figure 16.57	Extent of 2039 Do-Minimum Daytime LAeq,16h Surface Access Noise Contours
Figure 16.58	Extent of 2039 Do-Minimum Night-time LAeq,8h Surface Access Noise Contours
Figure 16.59	Extent of 2039 Do-Something Daytime LAeq,16h Surface Access Noise Contours
Figure 16.60	Extent of 2039 Do-Something Night-time LAeq,8h Surface Access Noise Contours
Figure 16.61	Change in 2039 Do-Something - Do-Minimum Daytime LAeq,16h Surface Access Noise Contours
Figure 16.62	Change in 2039 Do-Something - Do-Minimum Night-time LAeq,8h Surface Access Noise Contours





This drawing may contain mapping by permission of Ordnance Survey on behalf of HMSO © Crown Copyright and database rights 2022 Ordnance Survey 0100031673

All structure positions are indicative. The proposed works will be subject to detailed design development. The changes will be within limits of deviation specified in the Development Consent Order.

**Legend**

- Local Authority Boundaries
- Surface Access Noise Calculation Area
- Road Traffic Noise Important Area
- Road

**Surface Access Noise Contours in Decibels (dB) (2039 Do-Minimum Daytime LAeq, 16h at 4m free-field)**

- Below LOAEL
- LOAEL -  $\le 55$
- > 55 -  $\le 60$
- > 60 -  $\le 65$
- > 65 -  $\le 70$
- > 70 -  $\le 74$
- Above UAEL

Lowest Observed Adverse Effect Level (LOAEL) = 50 dB  
 Significant Observed Adverse Effect Level (SOAEL) = 63 dB  
 Unacceptable Adverse Effect Level (UAEL) = 74 dB

Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	13/06/23	P02
First Issue	LP	CSH	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

**Luton Rising** Our airport. Our community. Our planet.  
 Luton Rising  
 Hart House Business Centre  
 Kimpton Road, Luton, LU2 0LA  
 www.lutonrising.org.uk

**London Luton Airport Expansion Development Consent Order**

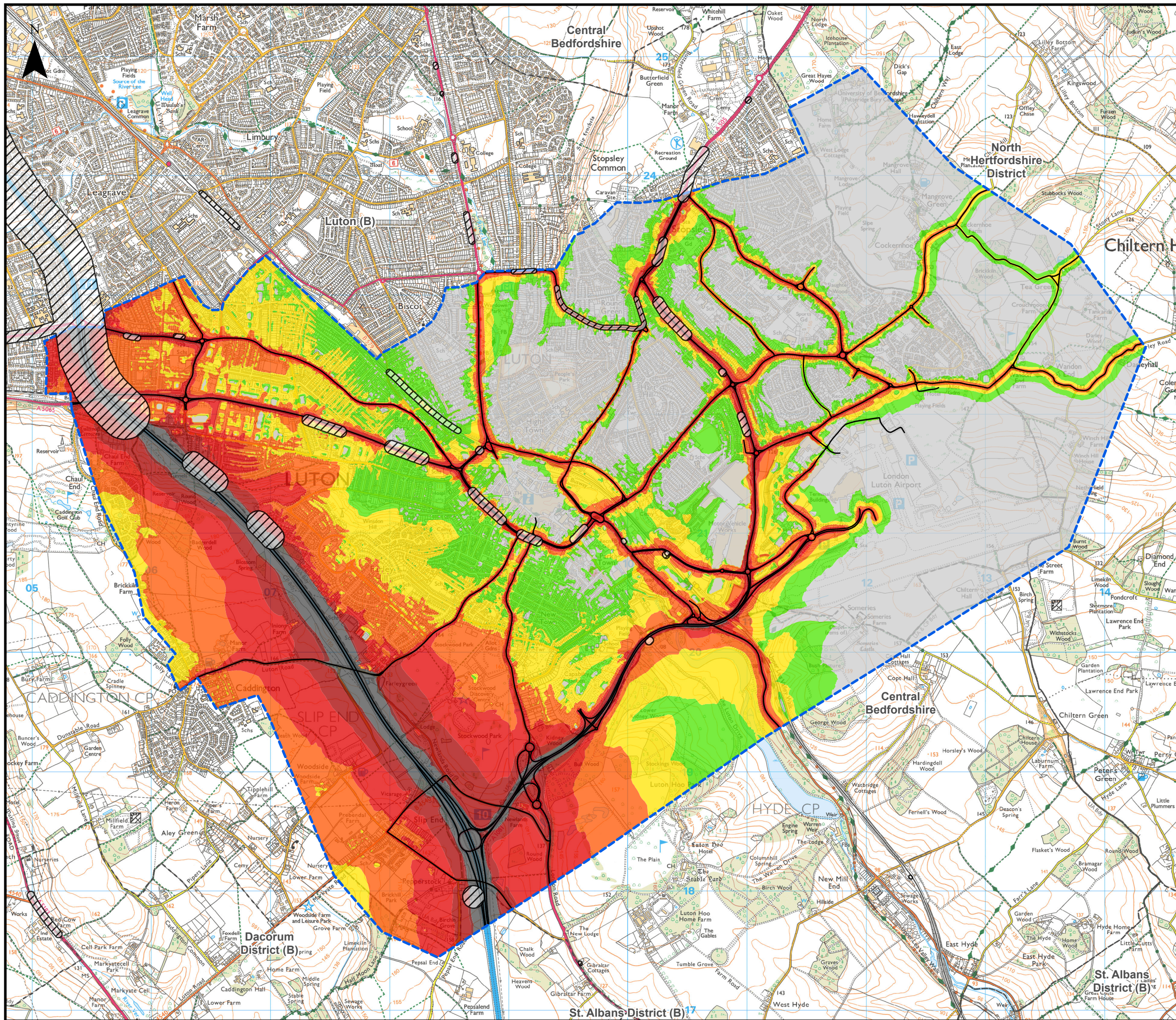
Drawing Title  
 Figure 16.57  
 Extent of 2039 Do-Minimum Daytime LAeq, 16h Surface Access Noise Contours

Purpose of issue	Additional submissions (updated in response to Rule 9 letter)					Suitability
Drawn	Checked	Approved	Date	Scale	Size	
HW	CSH	CS	13/06/23	1:30,000	A3	

DCO Application Ref.	APFP Regulation	DCO Document Ref.
TR020001	APFP 5(2)(a)	TR020001/APP/5.03

Drawing Number	Revision
LLADCO-3C-AEC-00-00-DR-YE-0057	P02
Project - Phase - Originator - Asset/Zone - Sub Asset - Type- Discp. - Number	





This drawing may contain mapping by permission of Ordnance Survey on behalf of HMSO © Crown Copyright and database rights 2022 Ordnance Survey 0100031673

All structure positions are indicative. The proposed works will be subject to detailed design development. The changes will be within limits of deviation specified in the Development Consent Order.

**Legend**

- Local Authority Boundaries
- Surface Access Noise Calculation Area
- Road Traffic Noise Important Area
- Road

**Surface Access Noise Contours in Decibels (dB) (2039 Do-Minimum Night-time LAeq,8h at 4m free-field)**

- Below LOAEL
- LOAEL - ≤ 45
- > 45 - ≤ 50
- > 50 - ≤ SOAEL
- > 55 - ≤ 60
- > 60 - ≤ 65
- > 65 - ≤ UAEL
- Above UAEL

Lowest Observed Adverse Effect Level (LOAEL) = 40 dB  
 Significant Observed Adverse Effect Level (SOAEL) = 55 dB  
 Unacceptable Adverse Effect Level (UAEL) = 66 dB

Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	13/06/23	P02
First Issue	LP	CSH	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

**Luton Rising** Our airport. Our community. Our planet.  
 Luton Rising  
 Hart House Business Centre  
 Kimpton Road, Luton, LU2 0LA  
 www.lutonrising.org.uk

**London Luton Airport Expansion Development Consent Order**

Drawing Title  
 Figure 16.58  
 Extent of 2039 Do-Minimum Night-time LAeq,8h Surface Access Noise Contours

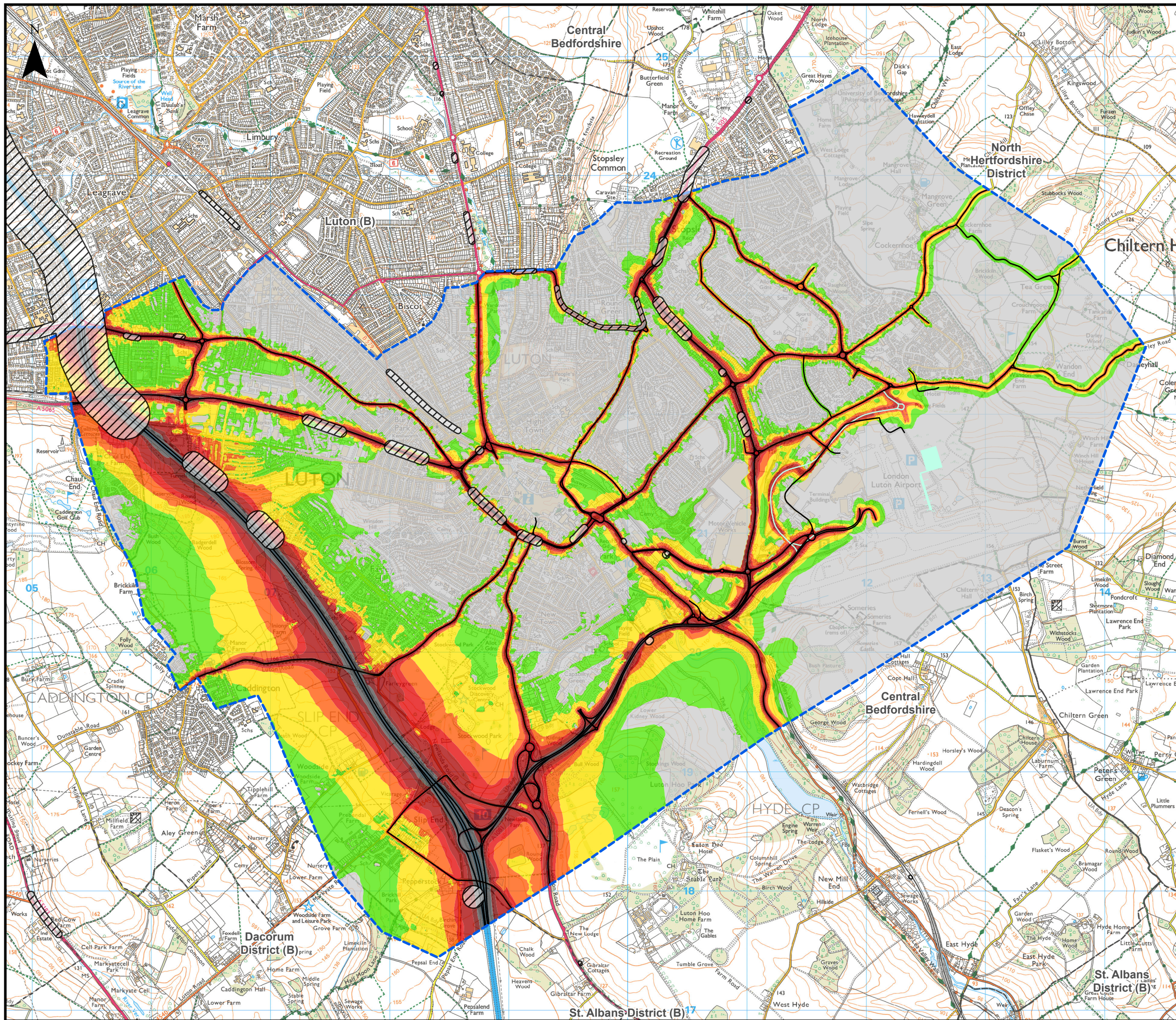
Purpose of issue	Additional submissions (updated in response to Rule 9 letter)					Suitability
Drawn	Checked	Approved	Date	Scale	Size	S2
HW	CSH	CS	13/06/23	1:30,000	A3	

DCO Application Ref.	APFP Regulation	DCO Document Ref.
TR020001	APFP 5(2)(a)	TR020001/APP/5.03

Drawing Number	Revision
LLADCO-3C-AEC-00-00-DR-YE-0058	P02

Project - Phase - Originator - Asset/Zone - Sub Asset - Type - Discp. - Number





This drawing may contain mapping by permission of Ordnance Survey on behalf of HMSO © Crown Copyright and database rights 2022 Ordnance Survey 0100031673

All structure positions are indicative. The proposed works will be subject to detailed design development. The changes will be within limits of deviation specified in the Development Consent Order.

**Legend**

- Local Authority Boundaries
- Surface Access Noise Calculation Area
- Road Traffic Noise Important Area
- Road
- Proposed Terminal - Assessment Phase 2a
- Airport Access Road

**Surface Access Noise Contours in Decibels (dB) (2039 Do-Something Daytime LAeq,16h at 4m free-field)**

- Below LOAEL
- LOAEL - ≤ 55
- > 55 - ≤ 60
- > 60 - ≤ SOAEL
- > SOAEL - ≤ 65
- > 65 - ≤ 70
- > 70 - ≤ UAEL
- Above UAEL

Lowest Observed Adverse Effect Level (LOAEL) = 50 dB  
 Significant Observed Adverse Effect Level (SOAEL) = 63 dB  
 Unacceptable Adverse Effect Level (UAEL) = 74 dB

Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	13/06/23	P02
	LP	CSH	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

**Luton Rising** Our airport. Our community. Our planet.  
 Luton Rising  
 Hart House Business Centre  
 Kimpton Road, Luton, LU2 0LA  
 www.lutonrising.org.uk

**London Luton Airport Expansion Development Consent Order**

Drawing Title: Figure 16.59  
 Extent of 2039 Do-Something Daytime LAeq,16h Surface Access Noise Contours

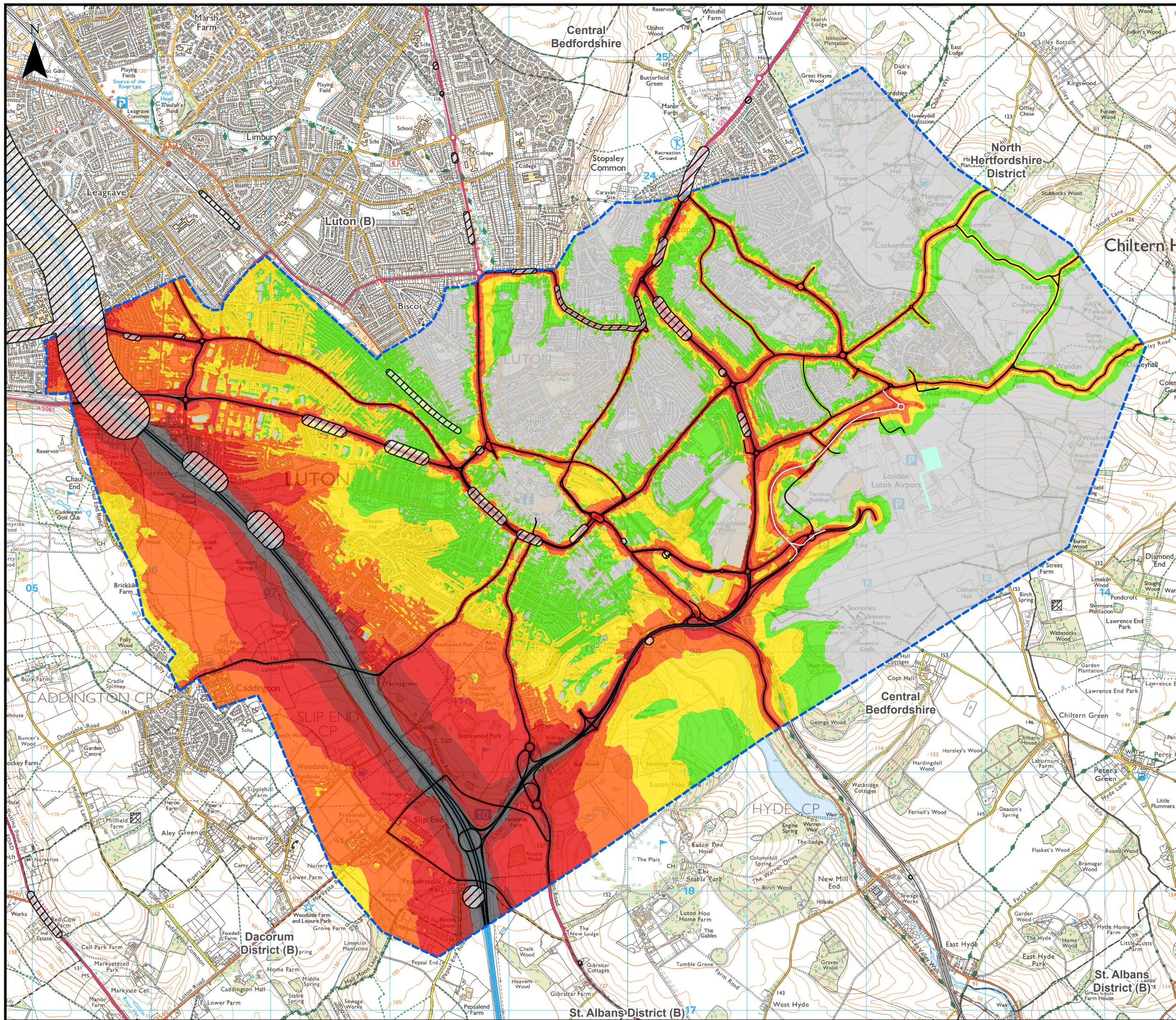
Purpose of issue				Suitability	
Additional submissions (updated in response to Rule 9 letter)				S2	
Drawn	Checked	Approved	Date	Scale	Size
HW	CSH	CS	13/06/23	1:30,000	A3

DCO Application Ref.	APFP Regulation	DCO Document Ref.
TR020001	APFP 5(2)(a)	TR020001/APP/5.03

Drawing Number	Revision
LLADCO-3C-AEC-00-00-DR-YE-0059	P02

Project - Phase - Originator - Asset/Zone - Sub Asset - Type- Discp. - Number





This drawing may contain mapping by permission of Ordnance Survey on behalf of HMSO © Crown Copyright and database rights 2022 Ordnance Survey 0100031673

All structure positions are indicative. The proposed works will be subject to detailed design development. The changes will be within limits of deviation specified in the Development Consent Order.

**Legend**

- Local Authority Boundaries
- Surface Access Noise Calculation Area
- Proposed Terminal - Assessment Phase 2a
- Road Traffic Noise Important Area
- Airport Access Road
- Road

**Surface Access Noise Contours in Decibels (dB) (2039 Do-Something Night-time LAeq,8h at 4m free-field)**

- Below LOAEL
- LOAEL - ≤ 45
- > 45 - ≤ 50
- > 50 - ≤ SOAEL
- > 55 - ≤ 60
- > 60 - ≤ 65
- > 65 - ≤ UAEL
- Above UAEL

Lowest Observed Adverse Effect Level (LOAEL) = 40 dB  
 Significant Observed Adverse Effect Level (SOAEL) = 55 dB  
 Unacceptable Adverse Effect Level (UAEL) = 66 dB

Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	13/06/23	P02
First Issue	LP	CSH	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

**Luton Rising** Our airport. Our community. Our planet.  
 Luton Rising  
 Hart House Business Centre  
 Kimpton Road, Luton, LU2 0LA  
 www.lutonrising.org.uk

**London Luton Airport Expansion Development Consent Order**

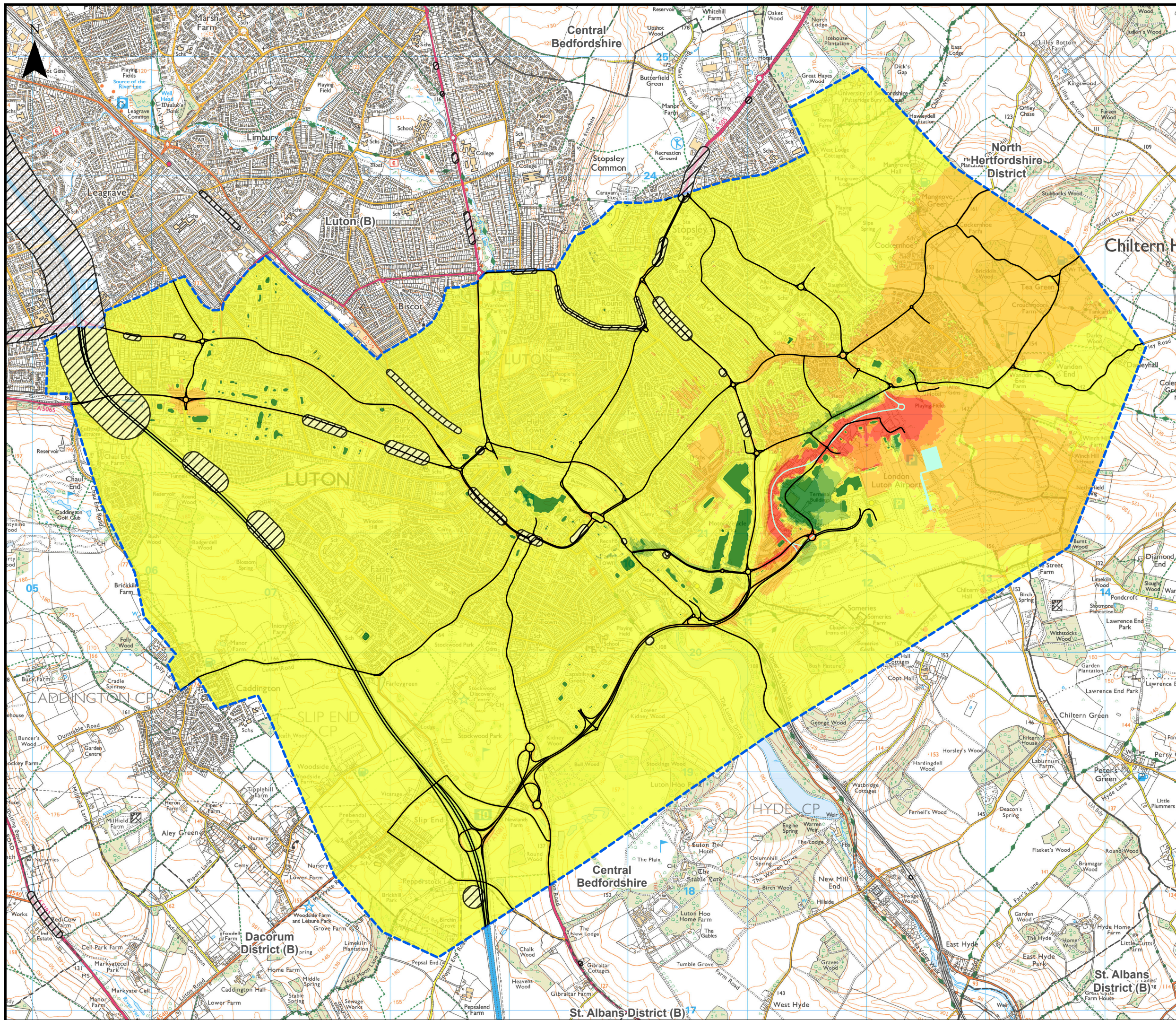
Drawing Title  
 Figure 16.60  
 Extent of 2039 Do-Something Night-time LAeq,8h Surface Access Noise Contours

Purpose of issue	Additional submissions (updated in response to Rule 9 letter)					Suitability
Drawn	Checked	Approved	Date	Scale	Size	
HW	CSH	CS	13/06/23	1:30,000	A3	

DCO Application Ref.	APFP Regulation	DCO Document Ref.
TR020001	APFP 5(2)(a)	TR020001/APP/5.03

Drawing Number	Revision
LLADCO-3C-AEC-00-00-DR-YE-0060	P02
Project - Phase - Originator - Asset/Zone - Sub Asset - Type- Discp. - Number	





This drawing may contain mapping by permission of Ordnance Survey on behalf of HMSO © Crown Copyright and database rights 2022 Ordnance Survey 0100031673

All structure positions are indicative. The proposed works will be subject to detailed design development. The changes will be within limits of deviation specified in the Development Consent Order.

**Legend**

- Local Authority Boundaries
- Surface Access Noise Calculation Area
- Proposed Terminal - Assessment Phase 2a
- Road Traffic Noise Important Area
- Road
- Airport Access Road

**Change in 2039 Do-Something and Do-Minimum Daytime LAeq,16h Surface Access Noise Contours in Decibels (dB)**

**Noise Decrease**

- 5.0 dB or more
- 3.0 to 4.9 dB
- 1.0 - 2.9 dB
- 0.1 - 0.9 dB

**Noise Increase**

- 0.1 - 0.9 dB
- 1.0 - 2.9 dB
- 3.0 - 4.9 dB
- 5.0 dB or more

Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	13/06/23	P02
First Issue	LP	CSH	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

**Luton Rising** Our airport. Our community. Our planet.

Luton Rising  
Hart House Business Centre  
Kimpton Road, Luton, LU2 0LA  
www.lutonrising.org.uk

**London Luton Airport Expansion Development Consent Order**

Drawing Title **Figure 16.61**  
**Change in 2039 Do-Something - Do-Minimum Daytime LAeq,16h Surface Access Noise Contours**

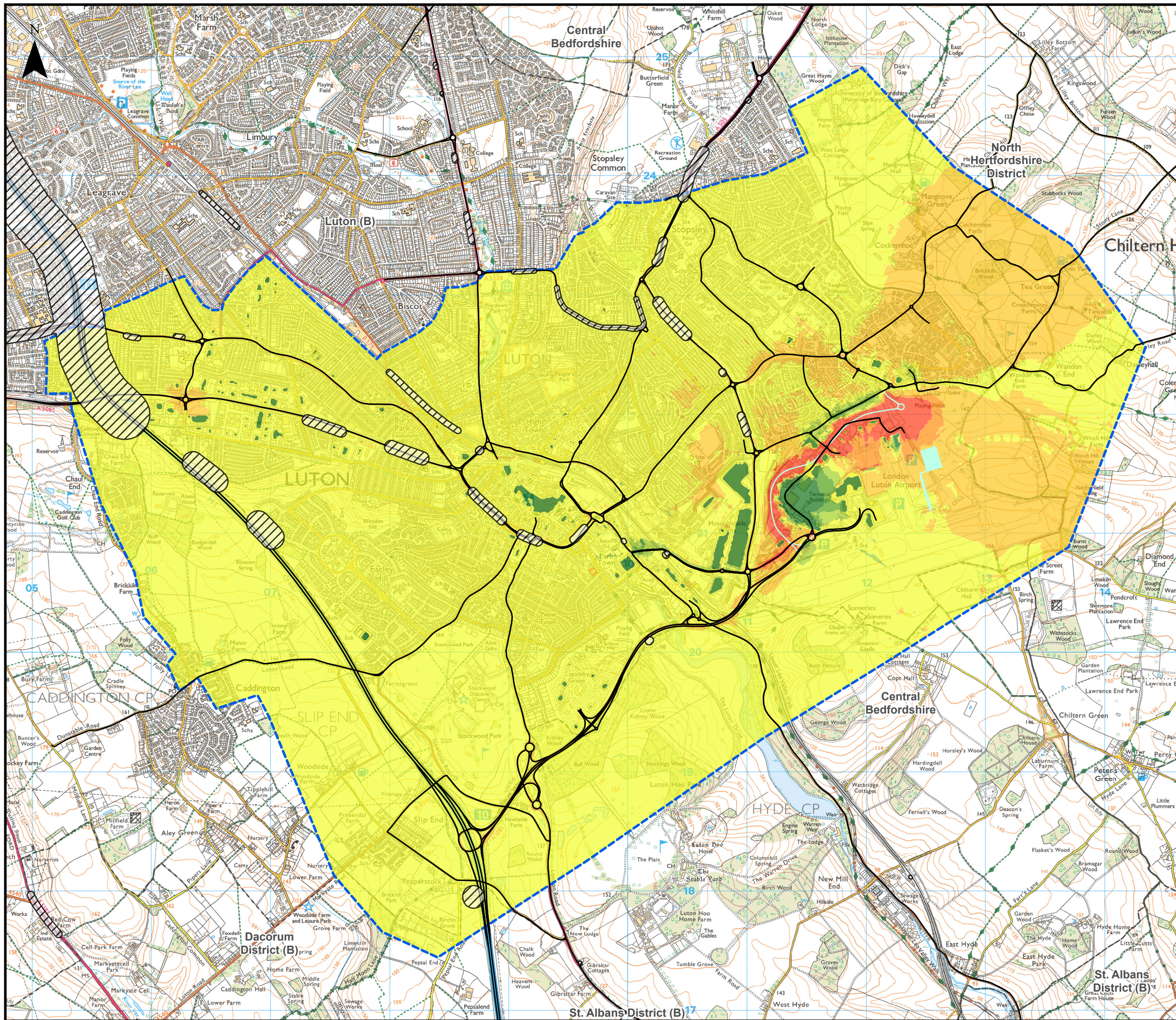
Purpose of issue	Additional submissions (updated in response to Rule 9 letter)				Suitability
Drawn	Checked	Approved	Date	Scale	Size
HW	CSH	CS	13/06/23	1:30,000	A3

DCO Application Ref.	APFP Regulation	DCO Document Ref.
TR020001	APFP 5(2)(a)	TR020001/APP/5.03

Drawing Number	Revision
LLADCO-3C-AEC-00-00-DR-YE-0061	P02

Project - Phase - Originator - Asset/Zone - Sub Asset - Type- Discp. - Number





This drawing may contain mapping by permission of Ordnance Survey on behalf of HMSO © Crown Copyright and database rights 2022 Ordnance Survey 0100031673

All structure positions are indicative. The proposed works will be subject to detailed design development. The changes will be within limits of deviation specified in the Development Consent Order.

- Legend**
- Local Authority Boundaries
  - Surface Access Noise Calculation Area
  - Road Traffic Noise Important Area
  - Proposed Terminal - Assessment Phase 2a
  - Road
  - Airport Access Road

**Change in 2039 Do-Something and Do-Minimum Night-time LAeq,8h Surface Access Noise Contours in Decibels (dB)**

- Noise Decrease**
- 5.0 dB or more
  - 3.0 to 4.9 dB
  - 1.0 - 2.9 dB
  - 0.1 - 0.9 dB
- Noise Increase**
- 0.1 - 0.9 dB
  - 1.0 - 2.9 dB
  - 3.0 - 4.9 dB
  - 5.0 dB or more

Additional submissions (updated in response to Rule 9 letter)	LP	CSh	CS	22/06/23	P02
First Issue	LP	CSh	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

**Luton Rising** Our airport. Our community. Our planet.

Luton Rising  
Hart House Business Centre  
Kimpton Road, Luton, LU2 0LA  
www.lutonrising.org.uk

**London Luton Airport Expansion Development Consent Order**

Drawing Title: Figure 16.62  
Change in 2039 Do-Something - Do-Minimum Night-time LAeq,8h Surface Access Noise Contours

Purpose of issue	Additional submissions (updated in response to Rule 9 letter)				Suitability
Drawn	Checked	Approved	Date	Scale	Size
LP	CSh	CS	22/06/23	1:30,000	A3

DCO Application Ref.	APFP Regulation	DCO Document Ref.
TR020001	APFP 5(2)(a)	TR020001/APP/5.03

Drawing Number	Revision
LLADCO-3C-AEC-00-00-DR-YE-0062	P02

Project - Phase - Originator - Asset/Zone - Sub Asset - Type - Discp. - Number