

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 16.95 - 16.100b

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

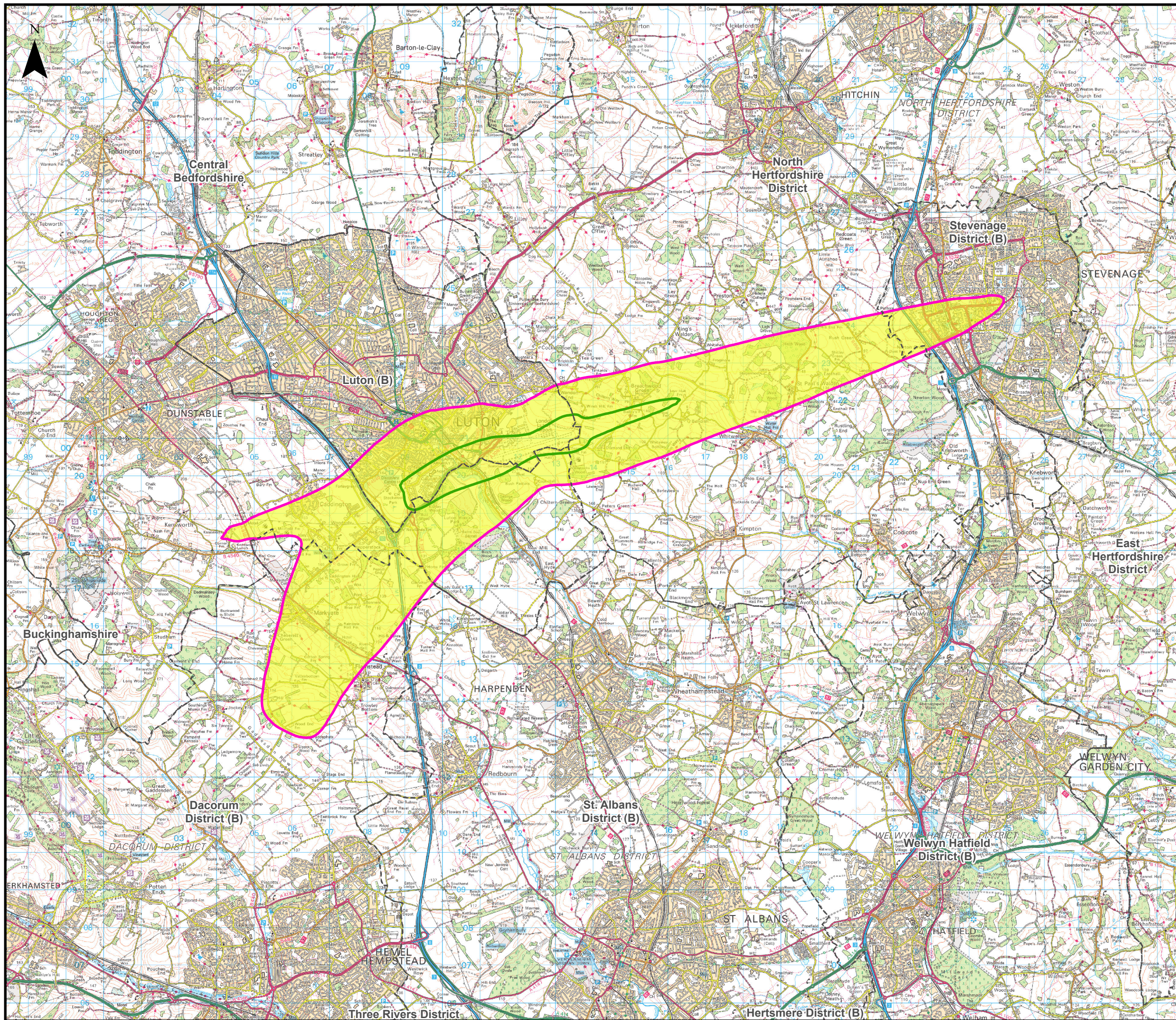
5.03 ENVIRONMENTAL STATEMENT CHAPTER 16 NOISE AND VIBRATION FIGURES 16.95 – 16.100b

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

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

Contents

Figure 16.95	Difference in Daytime LAeq,16h 2019 Actuals Baseline v 2019 Consented Baseline Air Noise Contours
Figure 16.96	Difference in Night-time LAeq,8h 2019 Actuals Baseline v 2019 Consented Baseline Air Noise Contours
Figure 16.97a	Change in 2027 Do-Something Faster Growth - Do-Minimum Daytime LAeq,16h Air Noise Contours
Figure 16.97b	Change in 2027 Do-Something Faster Growth - Do-Minimum Daytime LAeq,16h Air Noise Contours (Significant Observed Adverse Effect Level (SOAEL) Area)
Figure 16.98a	Change in 2027 Do-Something Faster Growth - Do-Minimum Night-time LAeq,8h Air Noise Contours
Figure 16.98b	Change in 2027 Do-Something Faster Growth - Do-Minimum Night-time LAeq,8h Air Noise Contours (Significant Observed Adverse Effect Level (SOAEL) Area)
Figure 16.99a	Change in 2030 Do-Something Slower Growth - Do-Minimum Daytime LAeq,16h Air Noise Contours
Figure 16.99b	Change in 2030 Do-Something Slower Growth - Do-Minimum Daytime LAeq,16h Air Noise Contours (Significant Observed Adverse Effect Level (SOAEL) Area)
Figure 16.100a	Change in 2030 Do-Something Slower Growth - Do-Minimum Night-time LAeq,8h Air Noise Contours
Figure 16.100b	Change in 2030 Do-Something Slower Growth - Do-Minimum Night-time LAeq,8h Air Noise Contours (Significant Observed Adverse Effect Level (SOAEL) Area)



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

Change in 2019 Actuals v Consented Daytime LAeq,16h Air Noise Contours in Decibels (dB)

- 0.1 to 0.9 dB
- 1.0 to 1.9 dB
- 2.0 to 2.9 dB
- 3.0 dB or more

Air Noise Contours in Decibels (dB) (2019 Actuals Daytime LAeq,16h)

Air Noise Contours in Decibels (dB) (2019 Actuals Daytime LAeq,16h)

- 51dB - Lowest Observed Adverse Effect Level (LOAEL)
- 63dB - Significant Observed Adverse Effect Level (SOAEL)

Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	15/06/23	P02
First Issue	MAB	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

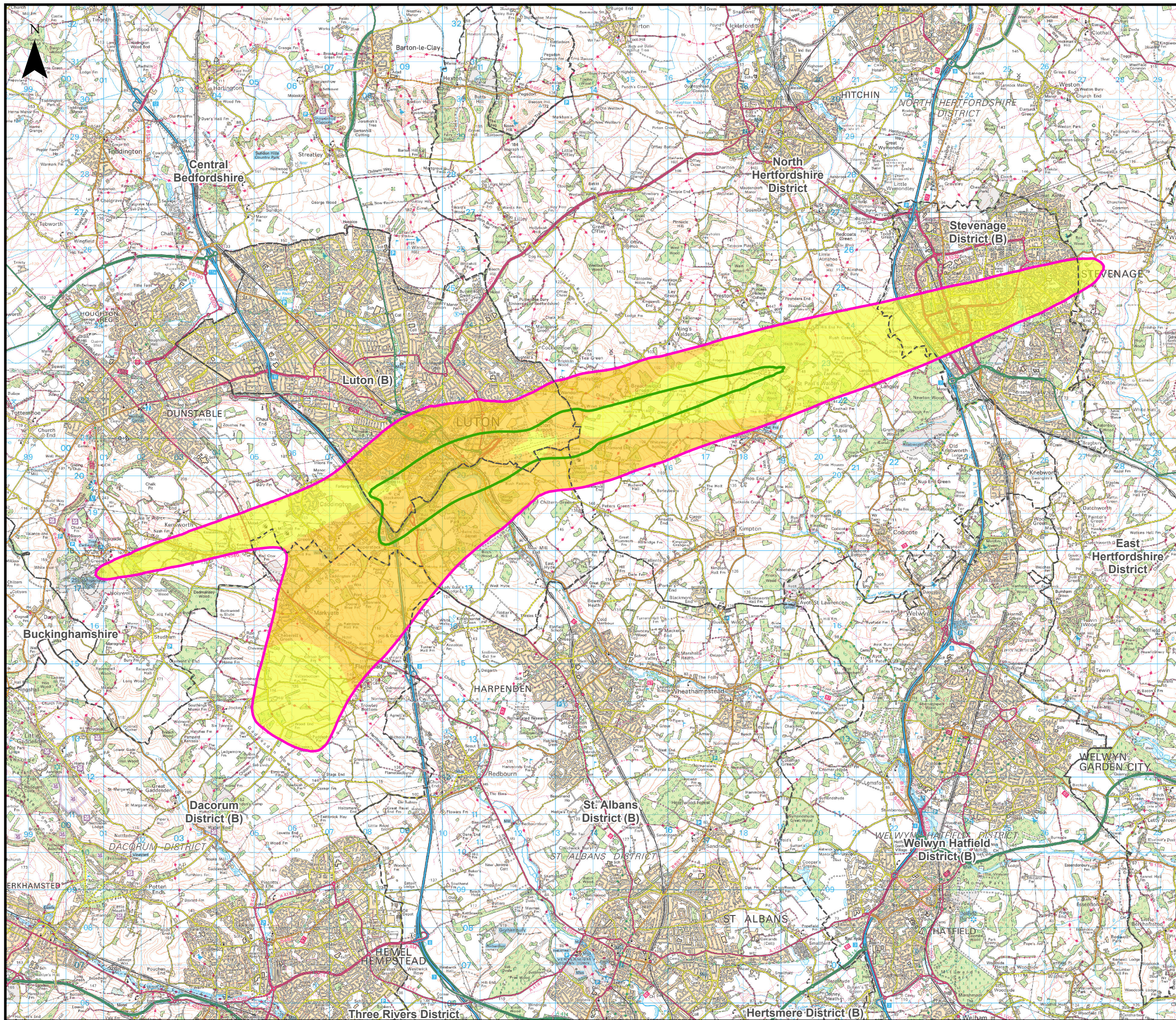
London Luton Airport Expansion Development Consent Order

Drawing Title: Figure 16.95
Difference in Daytime LAeq,16h
2019 Actuals Baseline v 2019 Consented Baseline
Air Noise Contours

Purpose of issue	Additional submissions (updated in response to Rule 9 letter)				Suitability
Drawn	Checked	Approved	Date	Scale	Size
HW	CSH	CS	15/06/23	1:95,000	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-0095	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

Change in 2019 Actuals v Consented Night-time LAeq,8h Air Noise Contours in Decibels (dB)

- 0.1 to 0.9 dB
- 1.0 to 1.9 dB
- 2.0 to 2.9 dB
- 3.0 dB or more

Air Noise Contours in Decibels (dB) (2019 Actuals Night-time LAeq,8h)

- 45dB - Lowest Observed Adverse Effect Level (LOAEL)
- 55dB - Significant Observed Adverse Effect Level (SOAEL)

Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	15/06/23	P02
First Issue	MAB	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

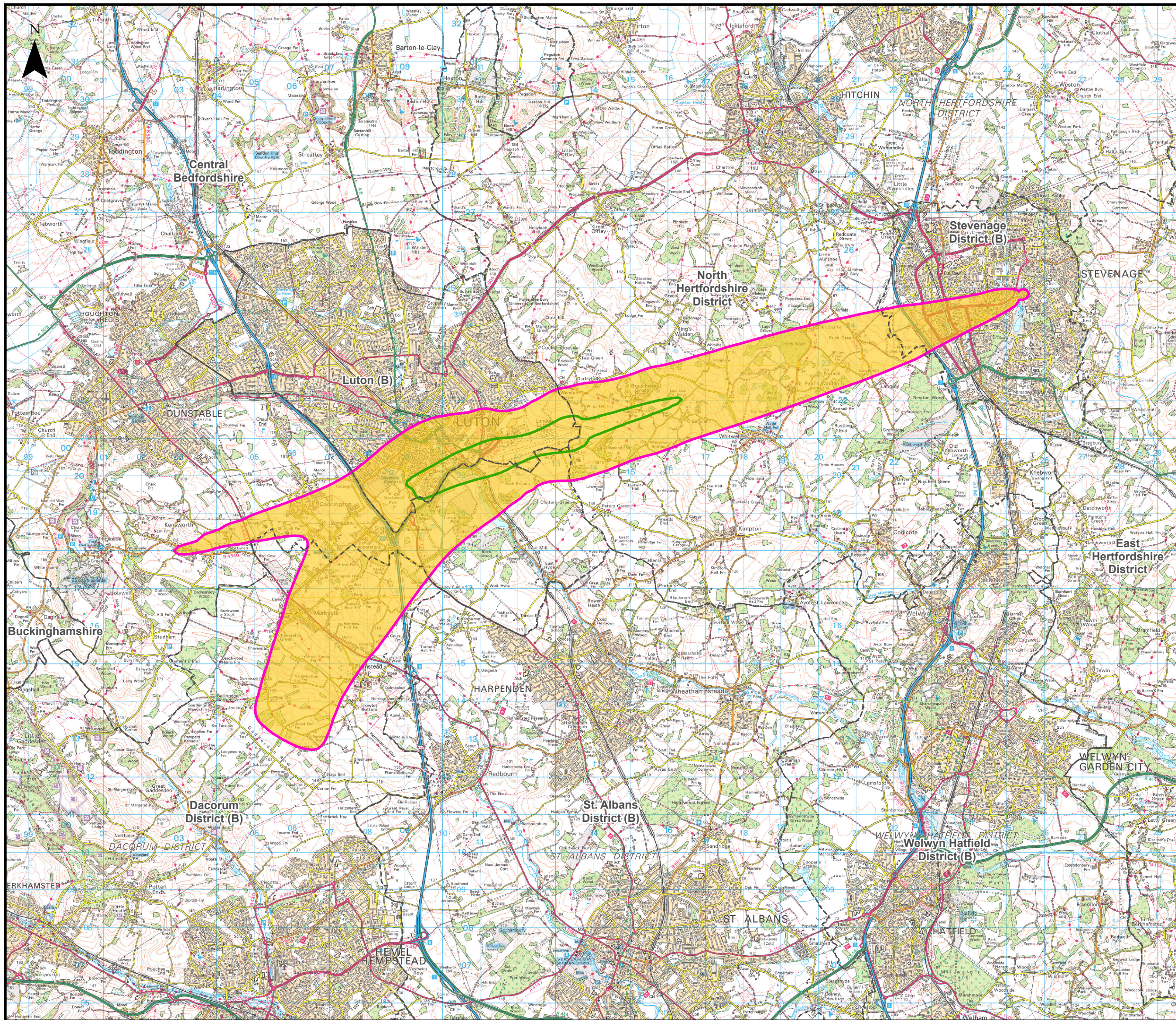
London Luton Airport Expansion Development Consent Order

Drawing Title: Figure 16.96
Difference in Night-time LAeq,8h
2019 Actuals Baseline v 2019 Consented Baseline
Air 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	15/06/23	1:95,000	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-0096	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

Change in 2027 Do-Something Faster Growth - Do-Minimum Daytime LAeq,16h Air Noise Contours in Decibels (dB)

- 0.1 to 0.9 dB
- 1.0 to 1.9 dB
- 2.0 to 2.9 dB
- 3.0 dB or more

Air Noise Contours in Decibels (dB) (2027 Do-something Faster Growth Daytime LAeq,16h)

- 51dB - Lowest Observed Adverse Effect Level (LOAEL)
- 63dB - Significant Observed Adverse Effect Level (SOAEL)

Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	15/06/23	P02
First Issue	MAB	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

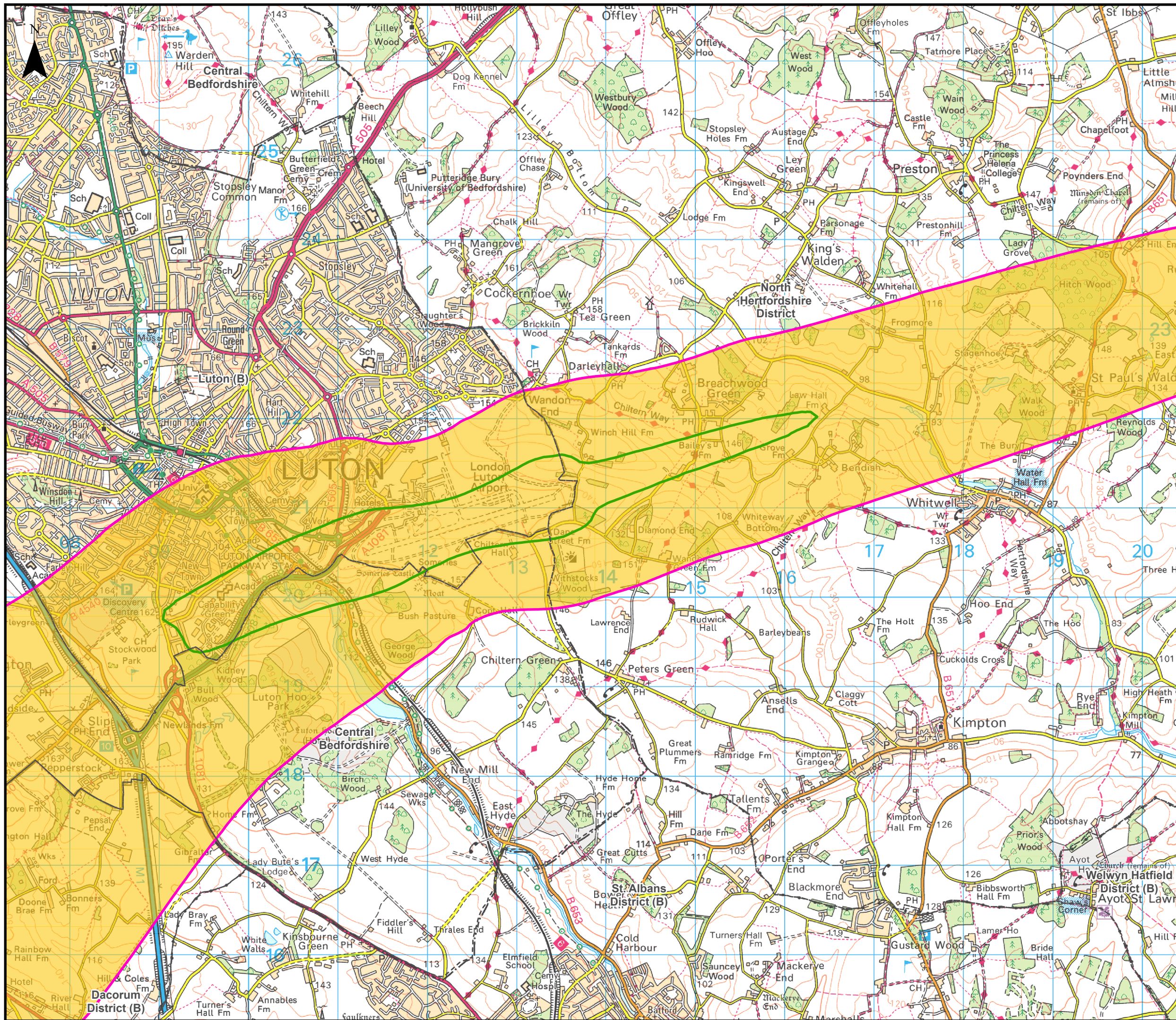
London Luton Airport Expansion Development Consent Order

Drawing Title: Figure 16.97a
Change in 2027 Do-Something Faster Growth - Do-Minimum Daytime LAeq,16h Air Noise Contours

Purpose of issue	Additional submissions (updated in response to Rule 9 letter)				Suitability
					S2
Drawn	Checked	Approved	Date	Scale	Size
HW	CSH	CS	15/06/23	1:95,000	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-0103	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
- Change in 2027 Do-Something Faster Growth - Do-Minimum Daytime LAeq,16h Air Noise Contours in Decibels (dB)**
 - 0.1 to 0.9 dB
 - 1.0 to 1.9 dB
 - 2.0 to 2.9 dB
 - 3.0 dB or more
- Air Noise Contours in Decibels (dB) (2027 Do-something Faster Growth Daytime LAeq,16h)**
 - 51dB - Lowest Observed Adverse Effect Level (LOAEL)
 - 63dB - Significant Observed Adverse Effect Level (SOAEL)

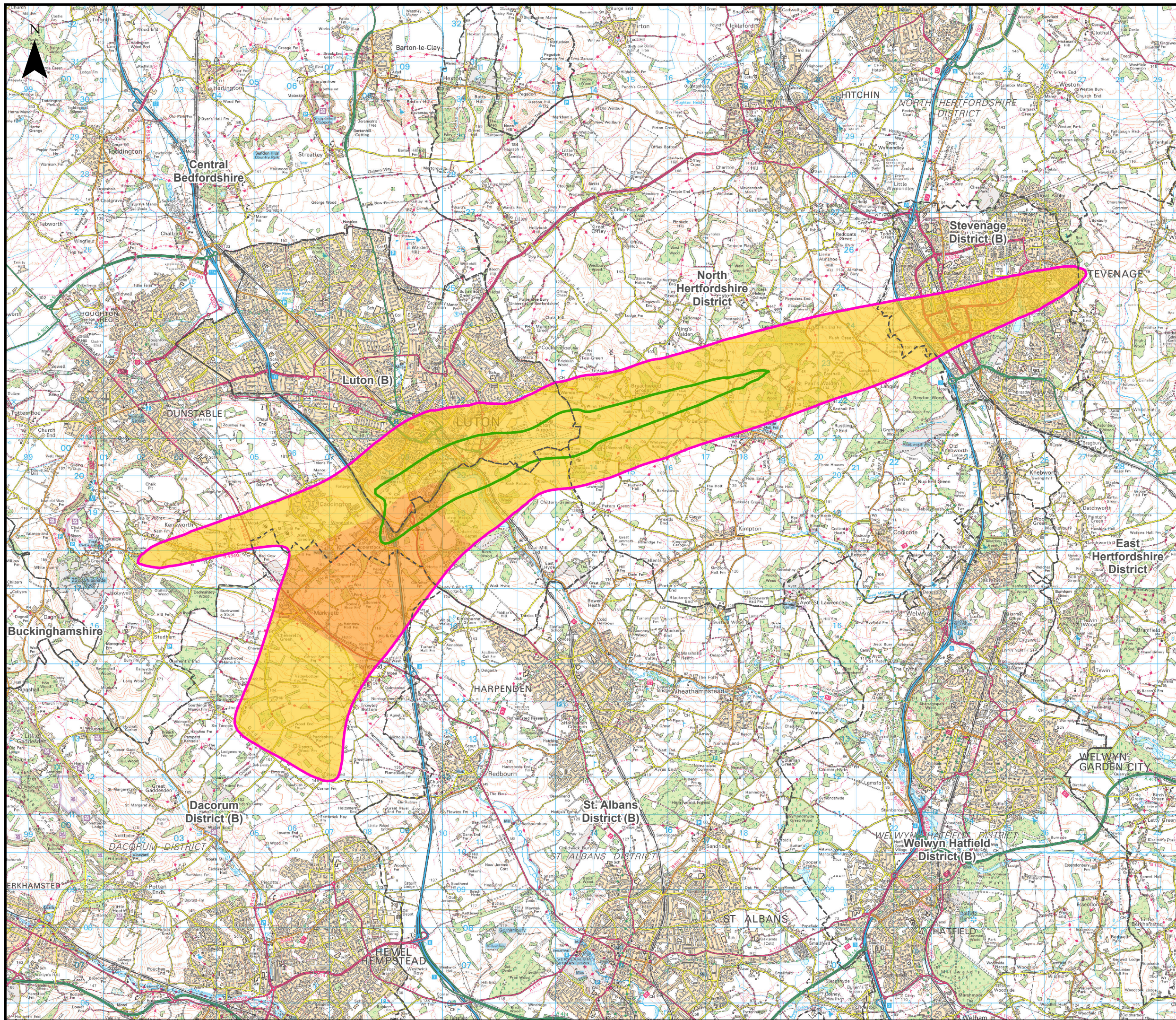
Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	15/06/23	P02
First Issue	MAB	CSH	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

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 16.97b Change in 2027 Do-Something Faster Growth - Do-Minimum Daytime LAeq,16h Air Noise Contours (Significant Observed Adverse Effect Level (SOAEL) Area)					
Purpose of issue						Suitability					
Additional submissions (updated in response to Rule 9 letter)						S2					
Drawn	Checked	Approved	Date	Scale	Size	Drawn	Checked	Approved	Date	Scale	Size
HW	CSH	CS	15/06/23	1:40,000	A3	HW	CSH	CS	15/06/23	1:40,000	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-0104											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

Change in 2027 Do-Something Faster Growth - Do-Minimum Night-time LAeq,8h Air Noise Contours in Decibels (dB)

- 0.1 to 0.9 dB
- 1.0 to 1.9 dB
- 2.0 to 2.9 dB
- 3.0 dB or more

Air Noise Contours in Decibels (dB) (2027 Do-something Faster Growth Night-time LAeq,8h)

- 45dB - Lowest Observed Adverse Effect Level (LOAEL)
- 55dB - Significant Observed Adverse Effect Level (SOAEL)

Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	15/06/23	P02
First Issue	MAB	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

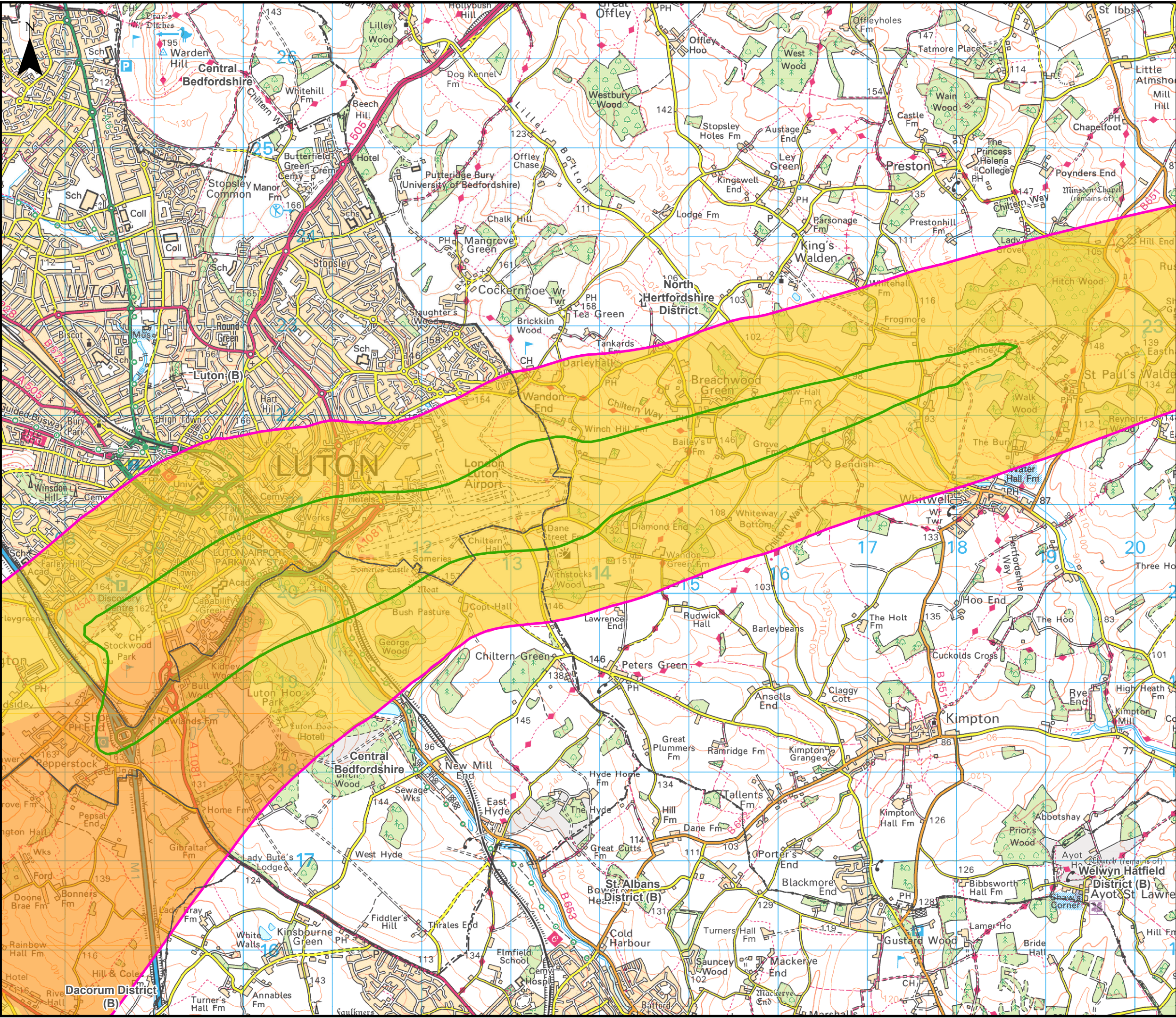
London Luton Airport Expansion Development Consent Order

Drawing Title: Figure 16.98a
Change in 2027 Do-Something Faster Growth - Do-Minimum Night-time LAeq,8h Air Noise Contours

Purpose of issue	Additional submissions (updated in response to Rule 9 letter)				Suitability
					S2
Drawn	Checked	Approved	Date	Scale	Size
HW	CSH	CS	15/06/23	1:95,000	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-0105	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

Change in 2027 Do-Something Faster Growth - Do-Minimum Night-time LAeq,8h Air Noise Contours in Decibels (dB)

- 0.1 to 0.9 dB
- 1.0 to 1.9 dB
- 2.0 to 2.9 dB
- 3.0 dB or more

Air Noise Contours in Decibels (dB) (2027 Do-something Faster Growth Night-time LAeq,8h)

- 45dB - Lowest Observed Adverse Effect Level (LOAEL)
- 55dB - Significant Observed Adverse Effect Level (SOAEL)

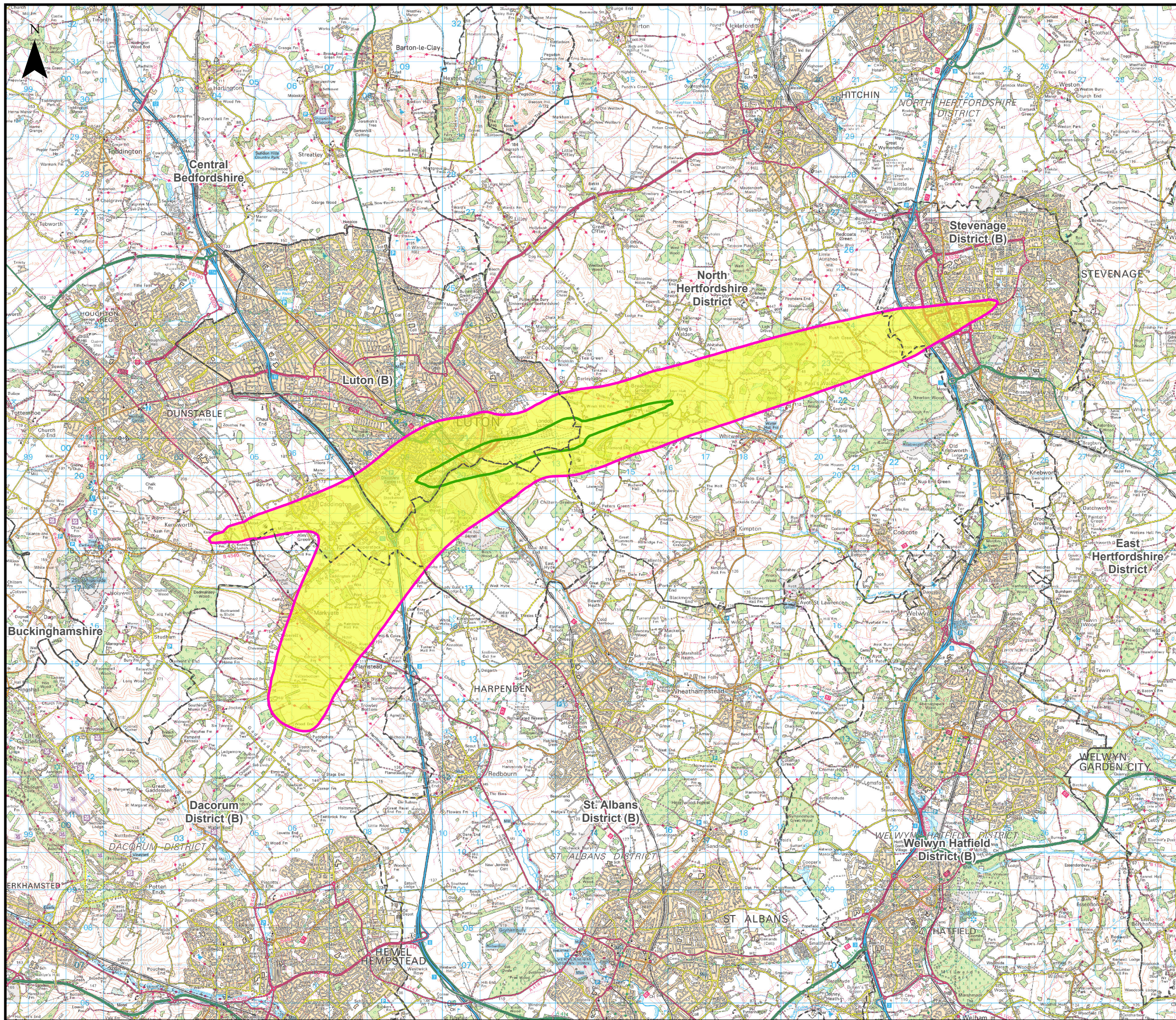
Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	15/06/23	P02
First Issue	MAB	CSH	CS	31/01/23	P01
Revision History	Drawn	Checked	Approved	Date	Rev.

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 16.98b Change in 2027 Do-Something Faster Growth - Do-Minimum Night-time LAeq,8h Air Noise Contours (Significant Observed Adverse Effect Level (SOAEL) Area)					
Purpose of issue						Suitability					
Additional submissions (updated in response to Rule 9 letter)						S2					
Drawn	Checked	Approved	Date	Scale	Size						
HW	CSH	CS	15/06/23	1:40,000	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-0106										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

Change in 2030 Do-Something Slower Growth - Do-Minimum Daytime LAeq,16h Air Noise Contours in Decibels (dB)

- 0.1 to 0.9 dB
- 1.0 to 1.9 dB
- 2.0 to 2.9 dB
- 3.0 dB or more

Air Noise Contours in Decibels (dB) (2030 Do-something Slower Growth Daytime LAeq,16h)

- 51dB - Lowest Observed Adverse Effect Level (LOAEL)
- 63dB - Significant Observed Adverse Effect Level (SOAEL)

Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	15/06/23	P02
First Issue	MAB	CSH	CS	21/12/22	P02
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

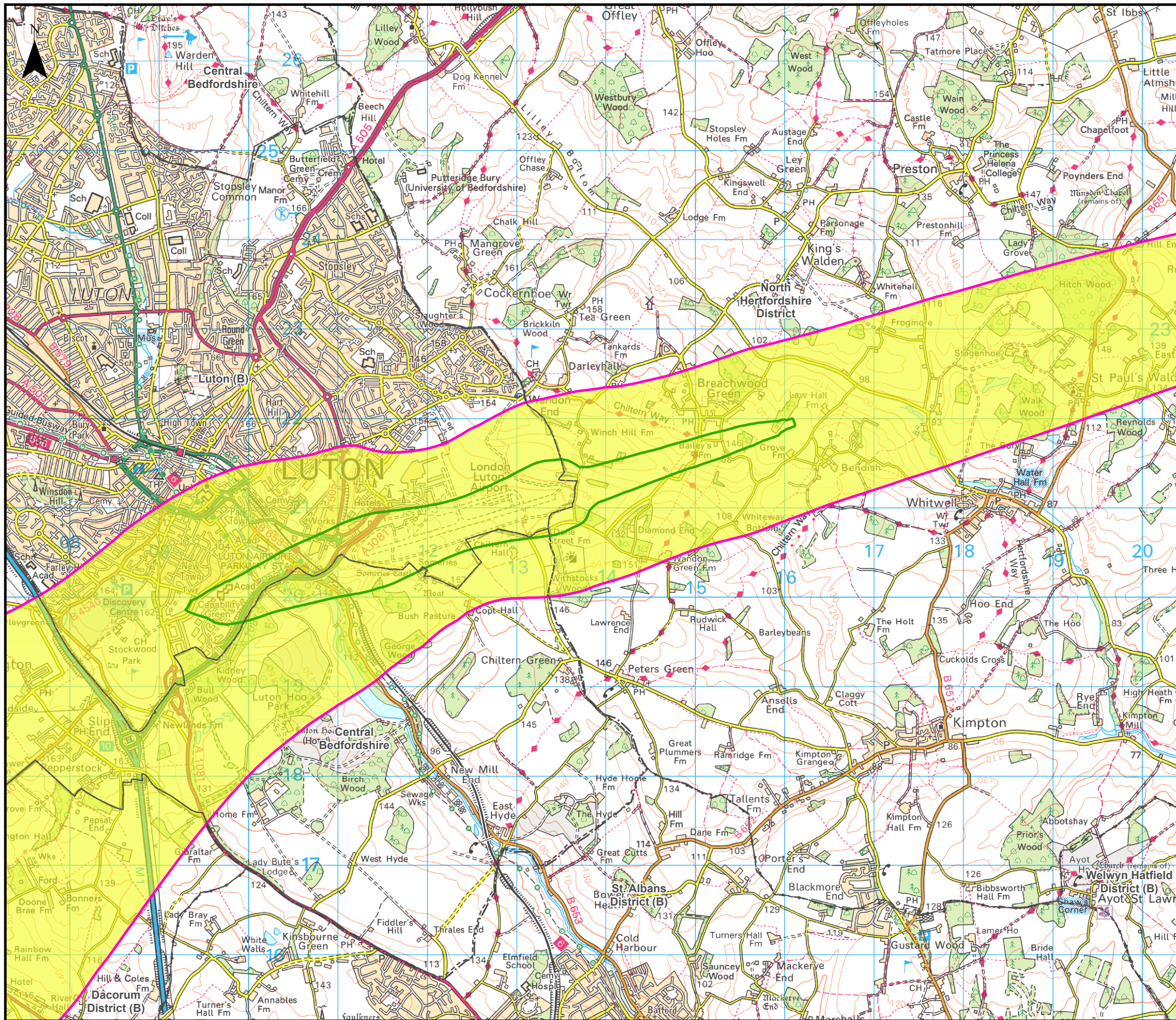
London Luton Airport Expansion Development Consent Order

Drawing Title: Figure 16.99a
Change in 2030 Do-Something Slower Growth - Do-Minimum Daytime LAeq,16h Air Noise Contours

Purpose of issue	Additional submissions (updated in response to Rule 9 letter)				Suitability
Drawn	Checked	Approved	Date	Scale	Size
HW	CSH	CS	15/06/23	1:95,000	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-0107	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

Change in 2030 Do-Something Slower Growth - Do-Minimum Daytime LAeq,16h Air Noise Contours in Decibels (dB)

- 0.1 to 0.9 dB
- 1.0 to 1.9 dB
- 2.0 to 2.9 dB
- 3.0 dB or more

Air Noise Contours in Decibels (dB) (2030 Do-Something Slower Growth Daytime LAeq,16h)

- 51dB - Lowest Observed Adverse Effect Level (LOAEL)
- 63dB - Significant Observed Adverse Effect Level (SOAEL)

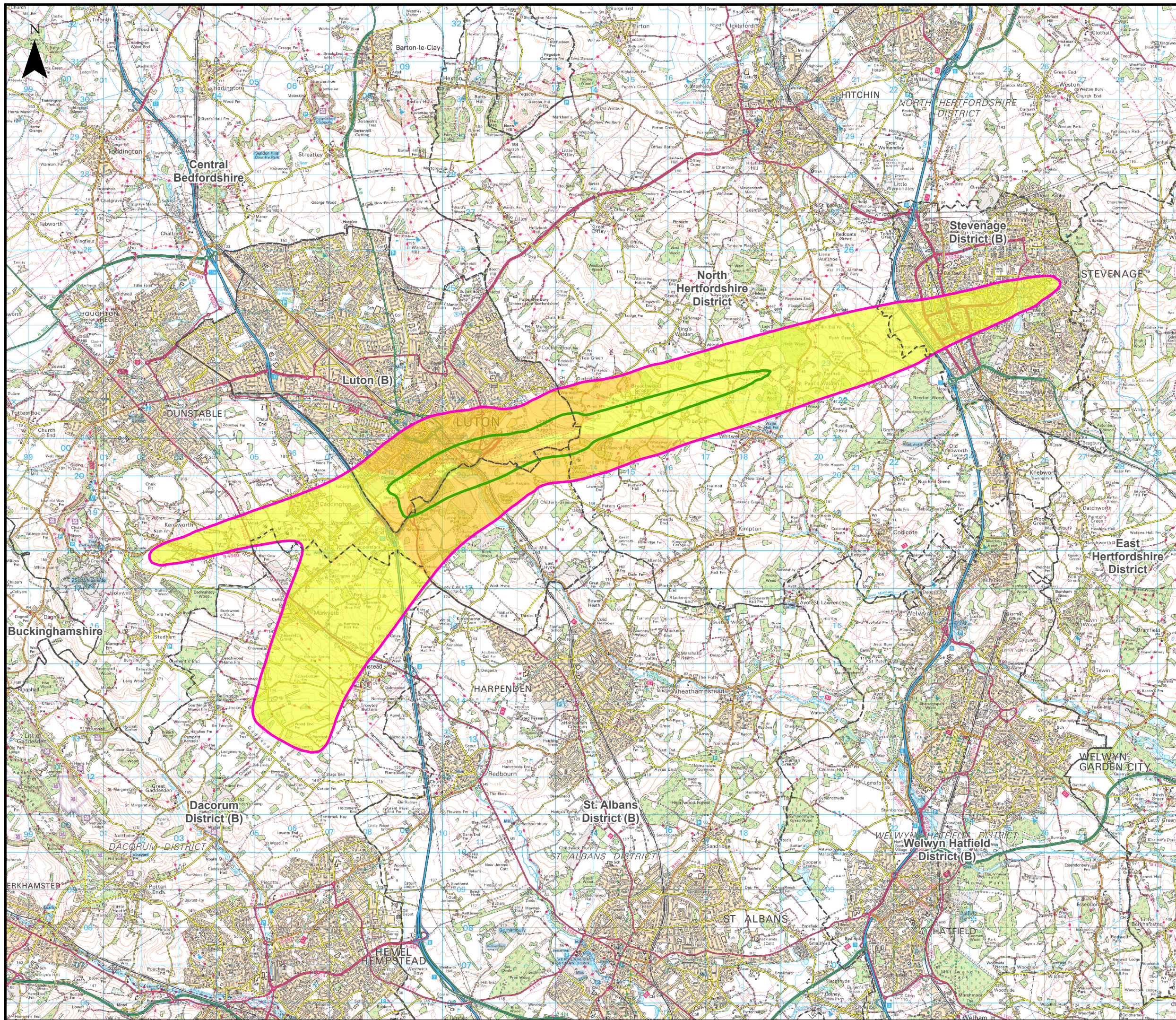
Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	15/06/23	P02
First Issue	MAB	CSH	CS	21/12/22	P02
Revision History	Drawn	Checked	Approved	Date	Rev.

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 16.99b Change in 2030 Do-Something Slower Growth - Do-Minimum Daytime LAeq,16h Air Noise Contours (Significant Observed Adverse Effect Level (SOAEL) Area)					
Purpose of issue						Suitability					
Additional submissions (updated in response to Rule 9 letter)						S2					
Drawn	Checked	Approved	Date	Scale	Size	Drawn	Checked	Approved	Date	Scale	Size
HW	CSH	CS	15/06/23	1:40,000	A3	HW	CSH	CS	15/06/23	1:40,000	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-0108											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

Change in 2030 Do-Something Slower Growth - Do-Minimum Night-time LAeq,8h Air Noise Contours in Decibels (dB)

- 0.1 to 0.9 dB
- 1.0 to 1.9 dB
- 2.0 to 2.9 dB
- 3.0 dB or more

Air Noise Contours in Decibels (dB) (2030 Do-something Slower Growth Night-time LAeq,8h)

- 45dB - Lowest Observed Adverse Effect Level (LOAEL)
- 55dB - Significant Observed Adverse Effect Level (SOAEL)

Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	15/06/23	P02
First Issue	MAB	CSH	CS	21/12/22	P02
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

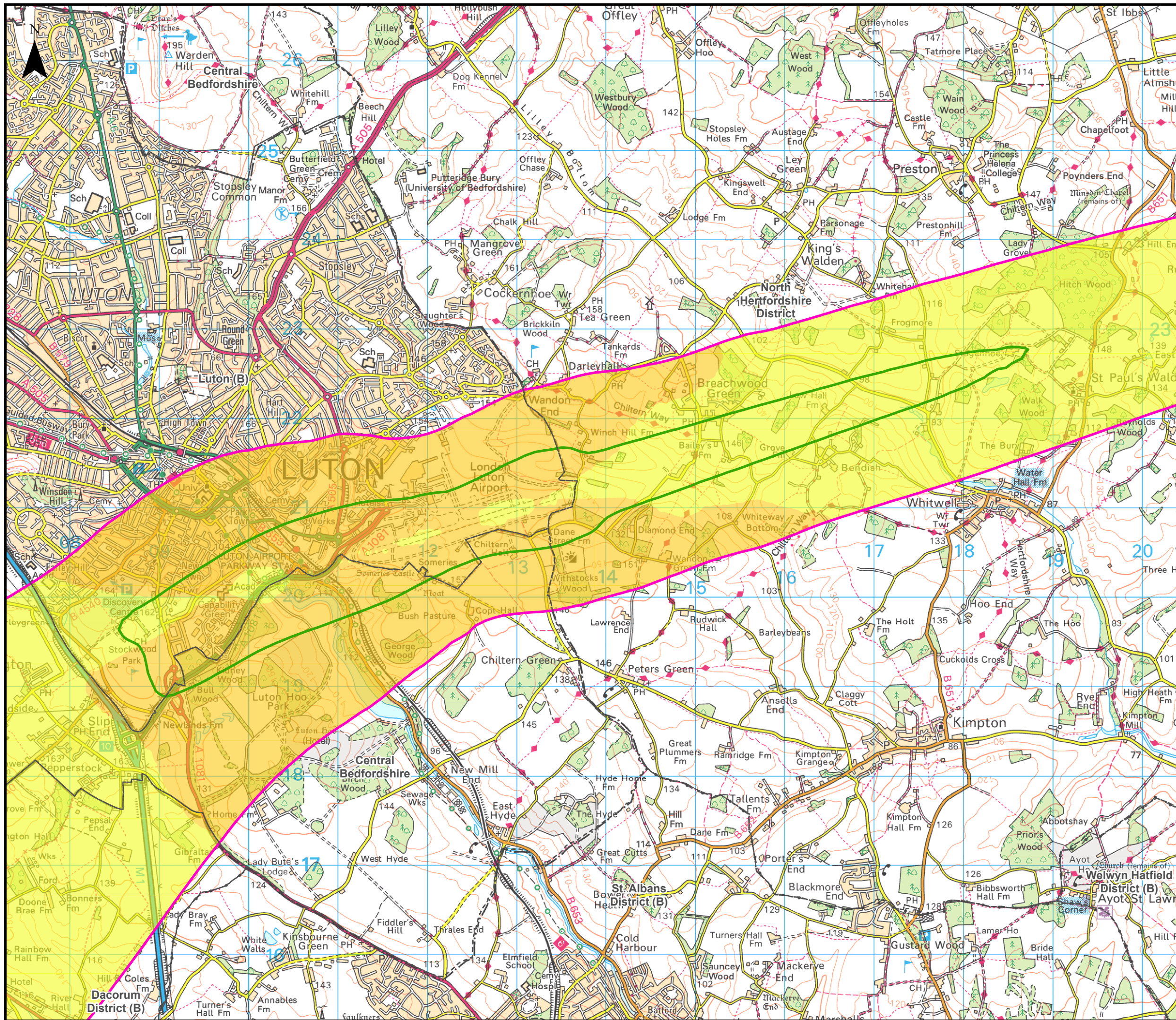
London Luton Airport Expansion Development Consent Order

Drawing Title: Figure 16.100a
Change in 2030 Do-Something Slower Growth - Do-Minimum Night-time LAeq,8h Air Noise Contours

Purpose of issue	Additional submissions (updated in response to Rule 9 letter)				Suitability
	Drawn	Checked	Approved	Date	Scale
	HW	CSH	CS	15/06/23	1:95,000
					Size
					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-0109	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
- Change in 2030 Do-Something Slower Growth - Do-Minimum Night-time LAeq,8h Air Noise Contours in Decibels (dB)**
 - 0.1 to 0.9 dB
 - 1.0 to 1.9 dB
 - 2.0 to 2.9 dB
 - 3.0 dB or more
- Air Noise Contours in Decibels (dB) (2030 Do-Something Slower Growth Night-time LAeq,8h)**
 - 45dB - Lowest Observed Adverse Effect Level (LOAEL)
 - 55dB - Significant Observed Adverse Effect Level (SOAEL)

Additional submissions (updated in response to Rule 9 letter)	HW	CSH	CS	15/06/23	P02
First Issue	MAB	CSH	CS	21/12/22	P02
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 16.100b Change in 2030 Do-Something Slower Growth - Do-Minimum Night-time LAeq,8h Air Noise Contours (Significant Observed Adverse Effect Level (SOAEL) Area)					
Purpose of issue					Suitability
Additional submissions (updated in response to Rule 9 letter)					S2
Drawn	Checked	Approved	Date	Scale	Size
HW	CSH	CS	15/06/23	1:40,000	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-0110					P02
Project - Phase - Originator - Asset/Zone - Sub Asset - Type- Discp. - Number					