



Gatwick Airport Northern Runway Project

Environmental Statement
Noise and Vibration Figures - Part 2

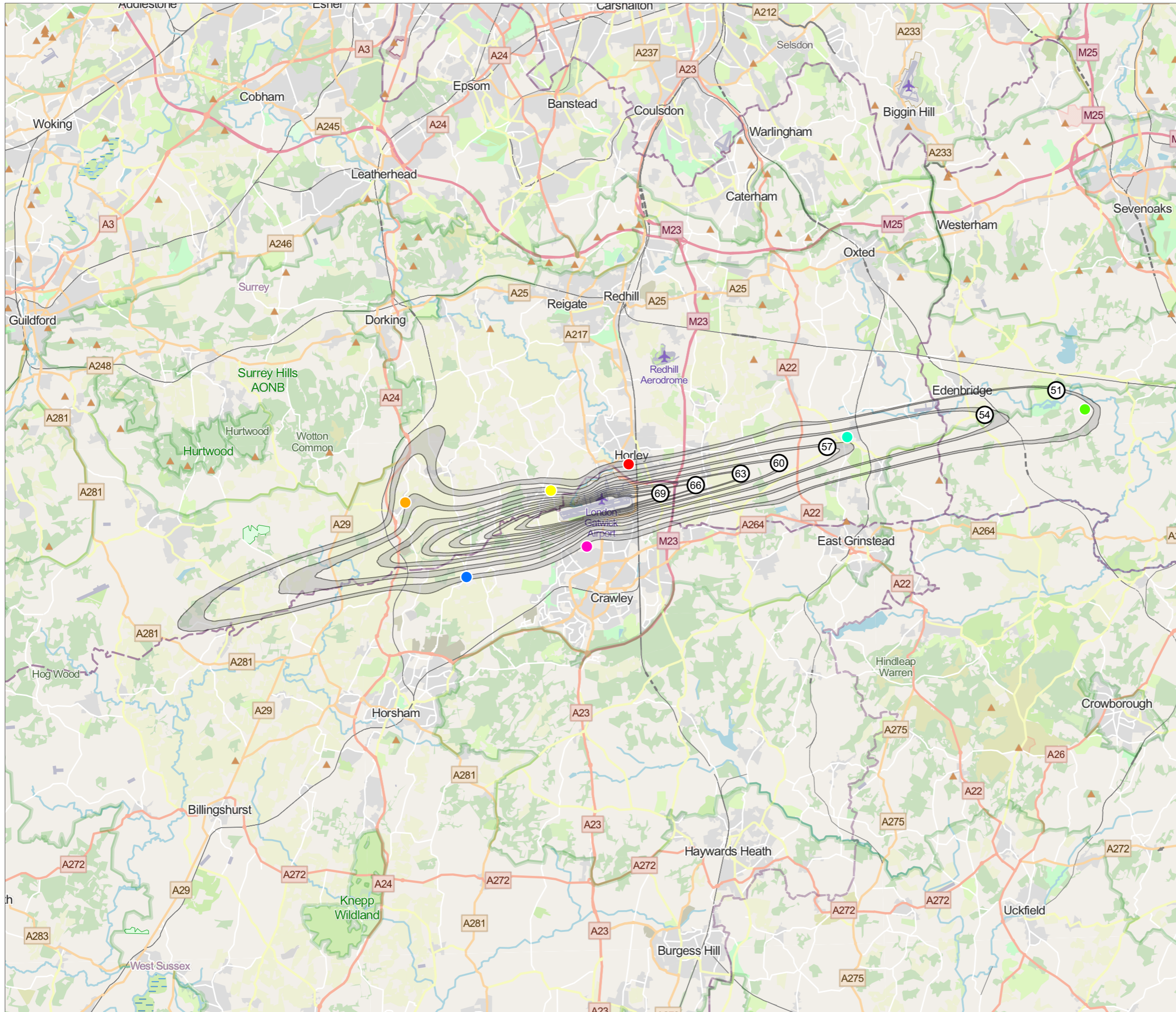
Book 5

VERSION: 1.0

DATE: JULY 2023

Application Document Ref: 5.2

PINS Reference Number: TR020005



KEY

Central Case and Slower Transition Fleet Case Range

Community Representative Locations

- Barnfield Care Home
- Capel Pre-School
- Charlwood Infant School
- Chiddingstone C of E School
- Lingfield Primary School
- Rusper Primary School
- Willow Tree Pre-School

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project, Leq 16 hr and Community Representative Locations

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.1

REVISION

For ES Issue

DRAWN BY

MTC

PM / CHECKED BY

SM

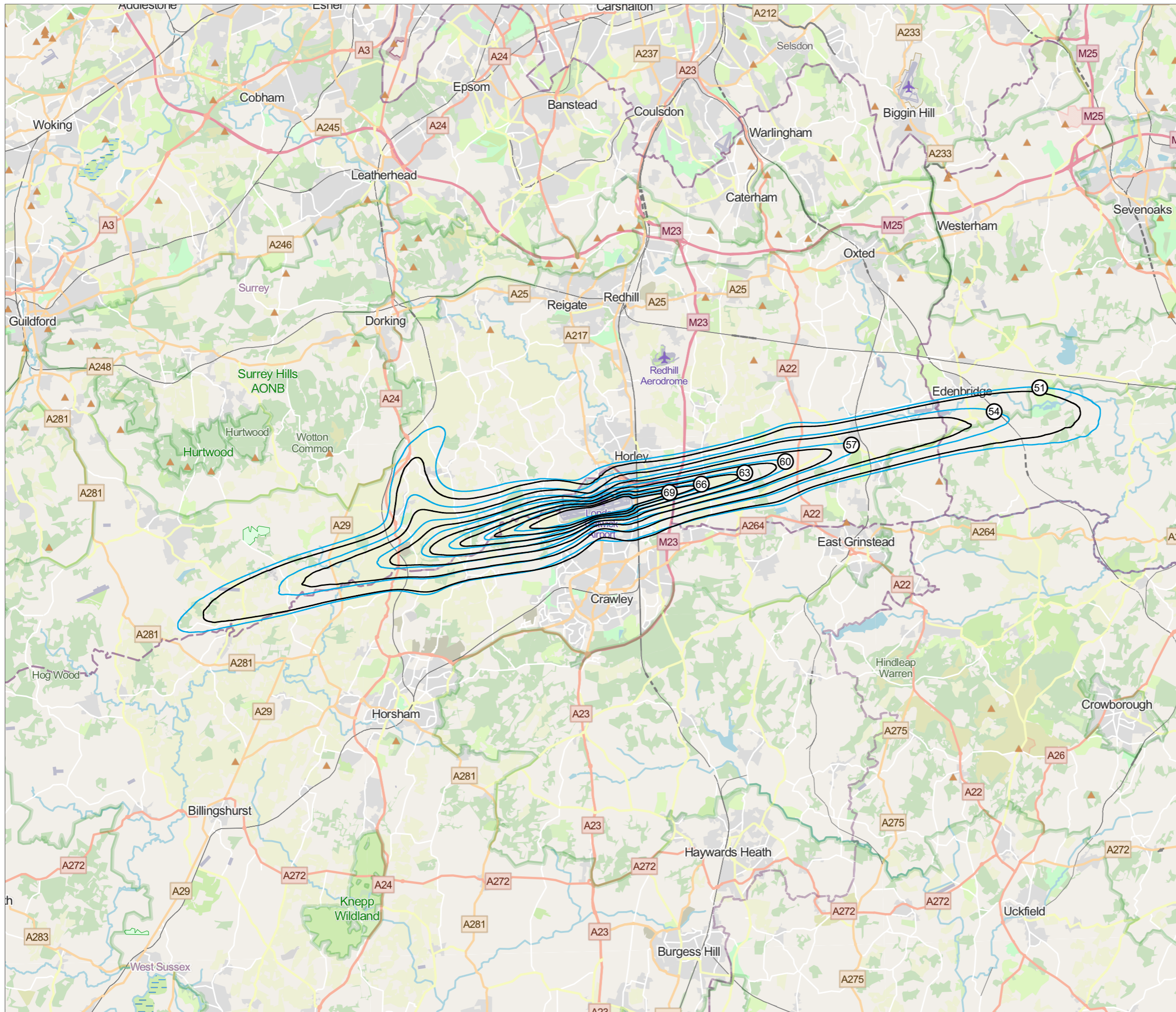
SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.

KEY

- 2032 Baseline Slower Transition Case
- 2032 Project Slower Transition Case



DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise With Project Slower Transition Case and 2032 Baseline Slower Transition Case, Leq 16 hr

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.2

REVISION

For ES Issue

DRAWN BY

MTC

PM / CHECKED BY

SM

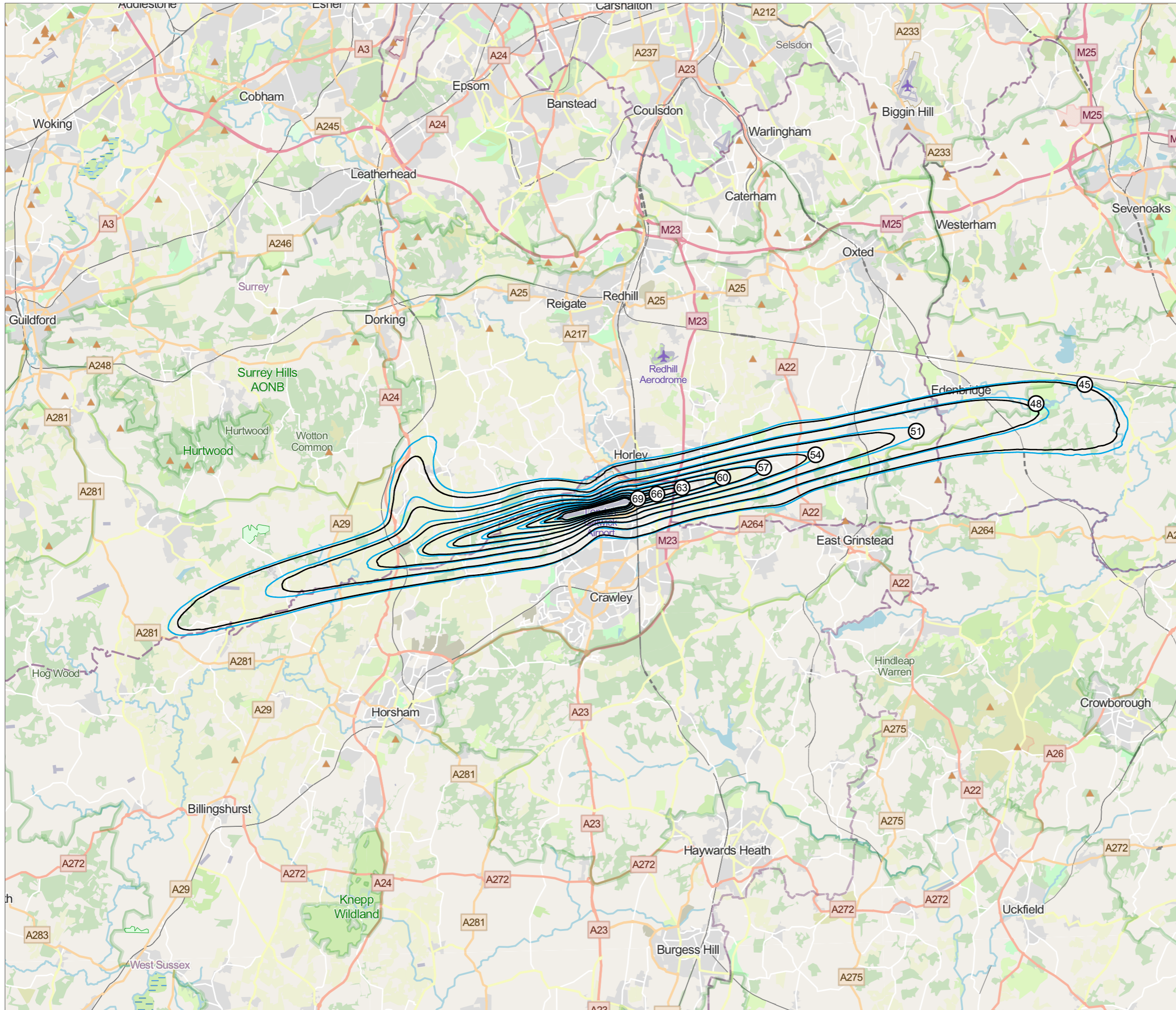
SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.

KEY

- 2032 Baseline Slower Transition Case
- 2032 Project Slower Transition Case



DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise With Project Slower Transition Case and 2032 Baseline Slower Transition Case, Leq 8 hr Night

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.3

REVISION

For ES Issue

DRAWN BY

MTC

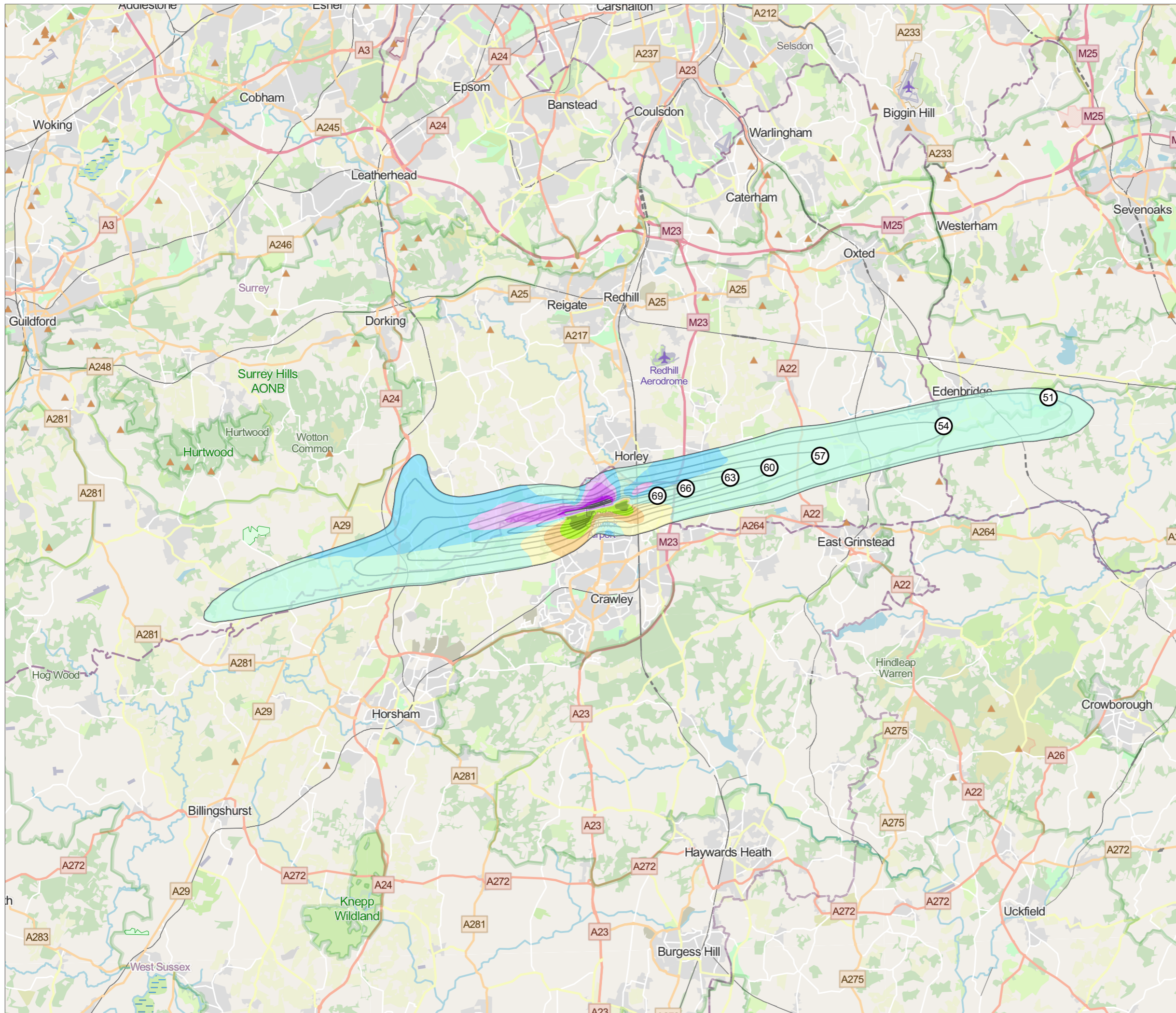
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- 6 to -3 dB decrease
- 3 to -2 dB decrease
- 2 to -1 dB decrease
- 1 to 0 dB decrease
- 0 to +1 dB increase
- +1 to +2 dB increase
- +2 to +3 dB increase
- +3 to +6 dB increase
- +6 to +9 dB increase
- > +9 dB increase

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project Central Case v
2032 Baseline Difference, L_{eq} 16 hr

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.4

REVISION

For ES
Issue

DRAWN BY

MTC

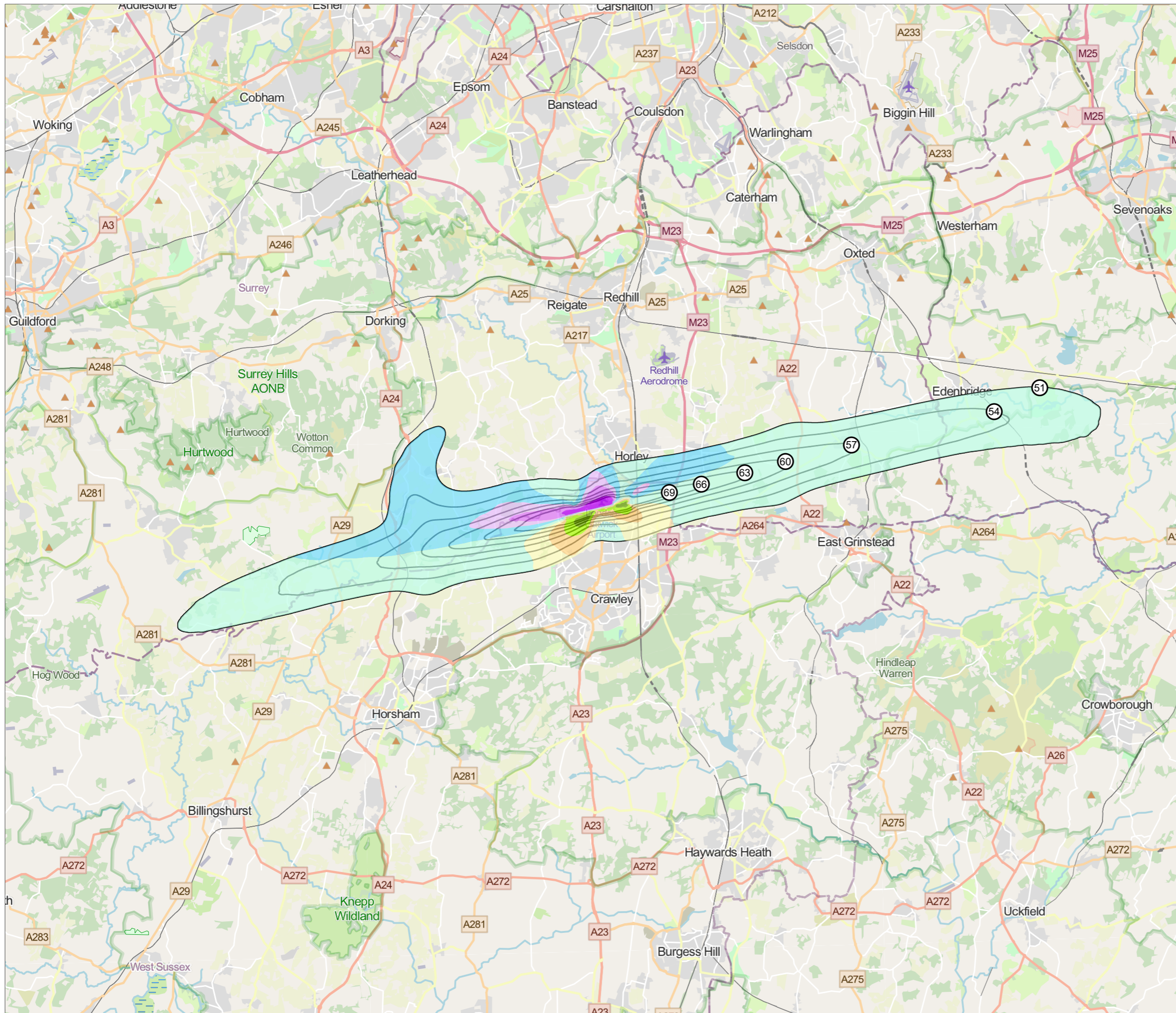
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- 6 to -3 dB decrease
- 3 to -2 dB decrease
- 2 to -1 dB decrease
- 1 to 0 dB decrease
- 0 to +1 dB increase
- +1 to +2 dB increase
- +2 to +3 dB increase
- +3 to +6 dB increase
- > +6 dB increase

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project Slower Transition Case v 2032 Baseline Difference, L_{eq} 16 hr

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.5

REVISION

For ES Issue

DRAWN BY

MTC

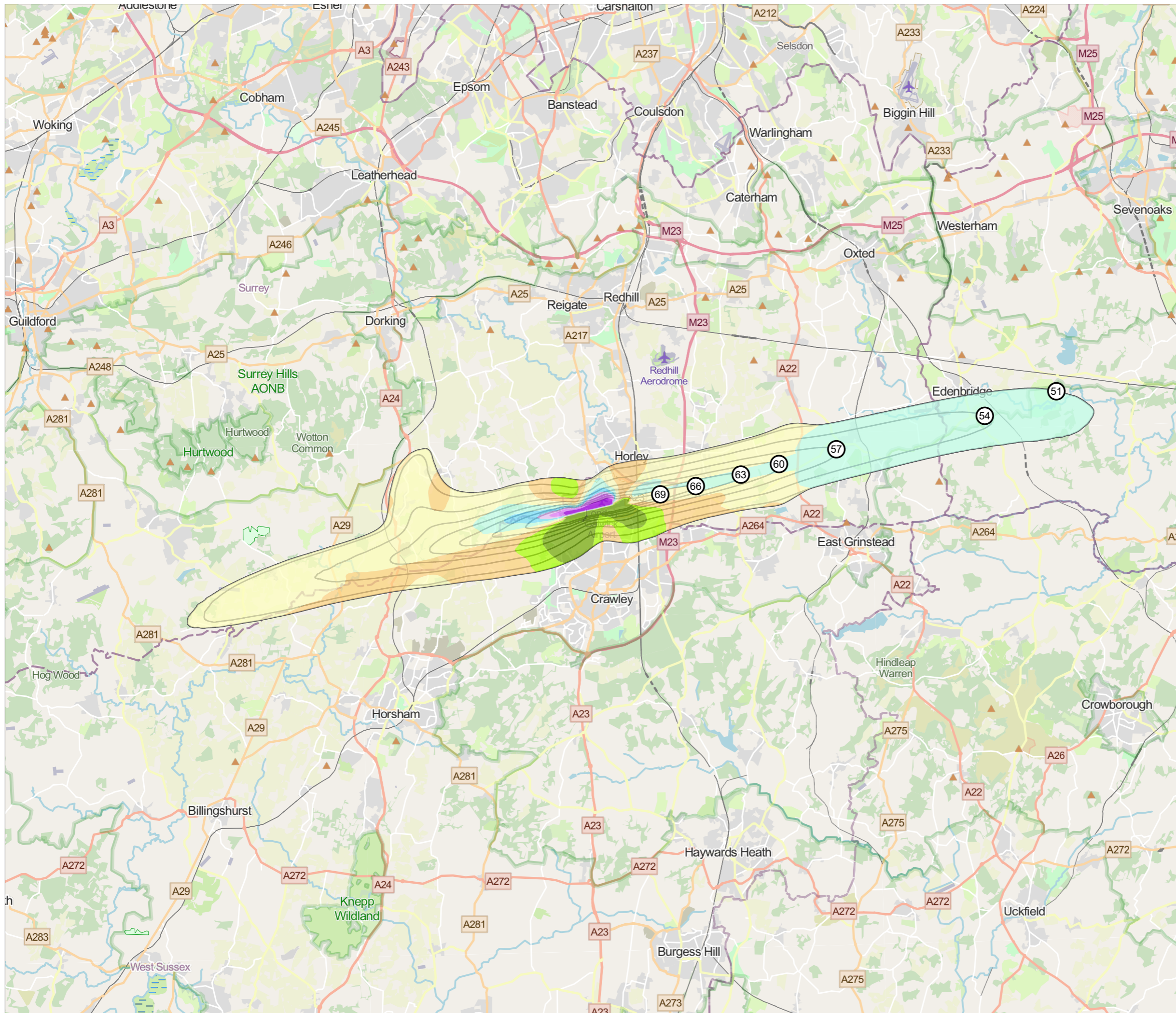
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- < -6 dB decrease
- 6 to -3 dB decrease
- 3 to -2 dB decrease
- 2 to -1 dB decrease
- 1 to 0 dB decrease
- 0 to +1 dB increase
- +1 to +2 dB increase
- +2 to +3 dB increase
- +3 to +6 dB increase
- > +6 dB increase

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project
Central Case v 2019 Baseline
Difference, L_{eq} 16 hr

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.6

REVISION

For ES
Issue

DRAWN BY

MTC

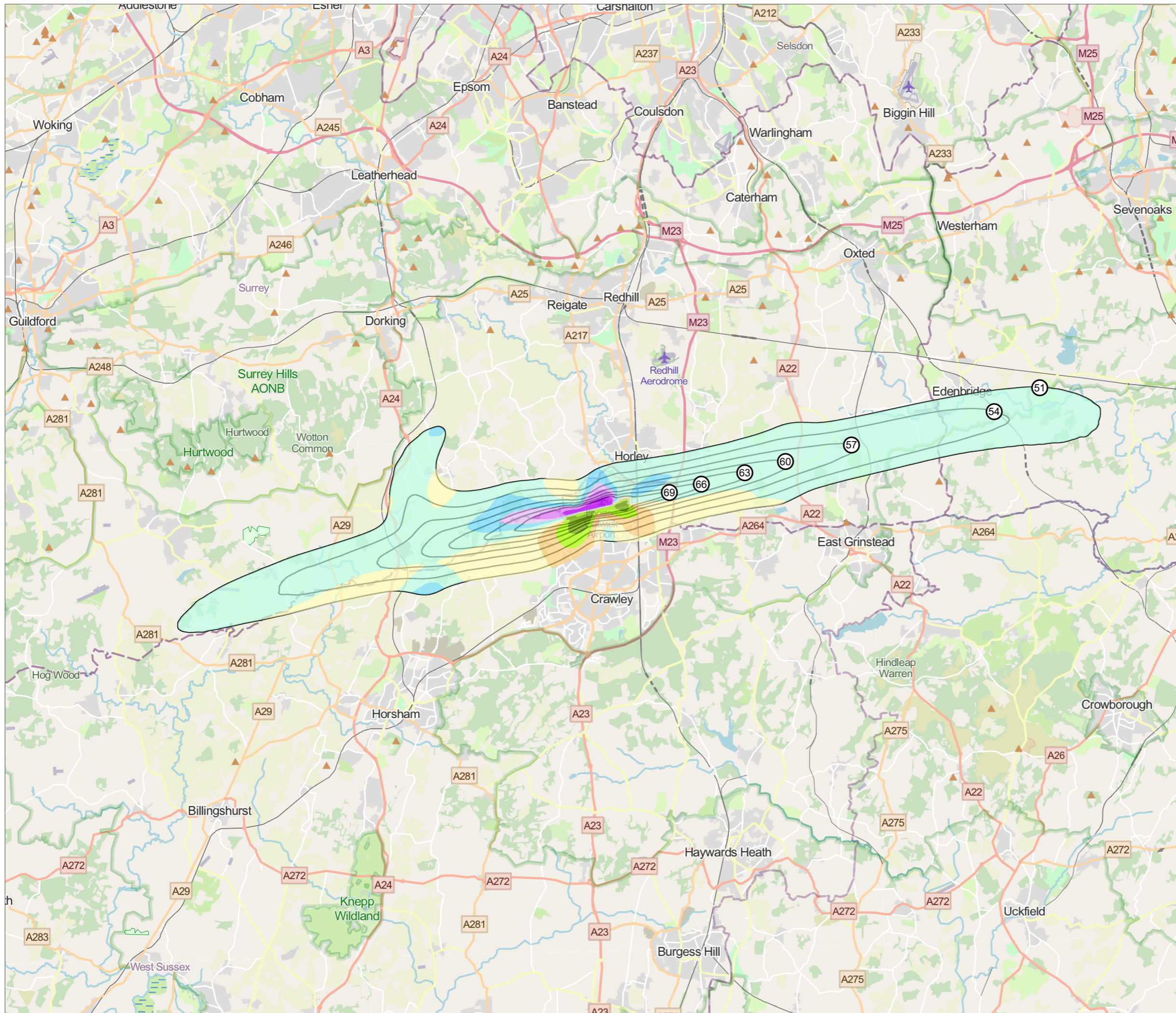
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- 6 to -3 dB decrease
- 3 to -2 dB decrease
- 2 to -1 dB decrease
- 1 to 0 dB decrease
- 0 to +1 dB increase
- +1 to +2 dB increase
- +2 to +3 dB increase
- +3 to +6 dB increase
- > +6 dB increase

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project Slower Transition Case v 2019 Baseline Difference, L_{eq} 16 hr

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.7

REVISION

For ES Issue

DRAWN BY

MTC

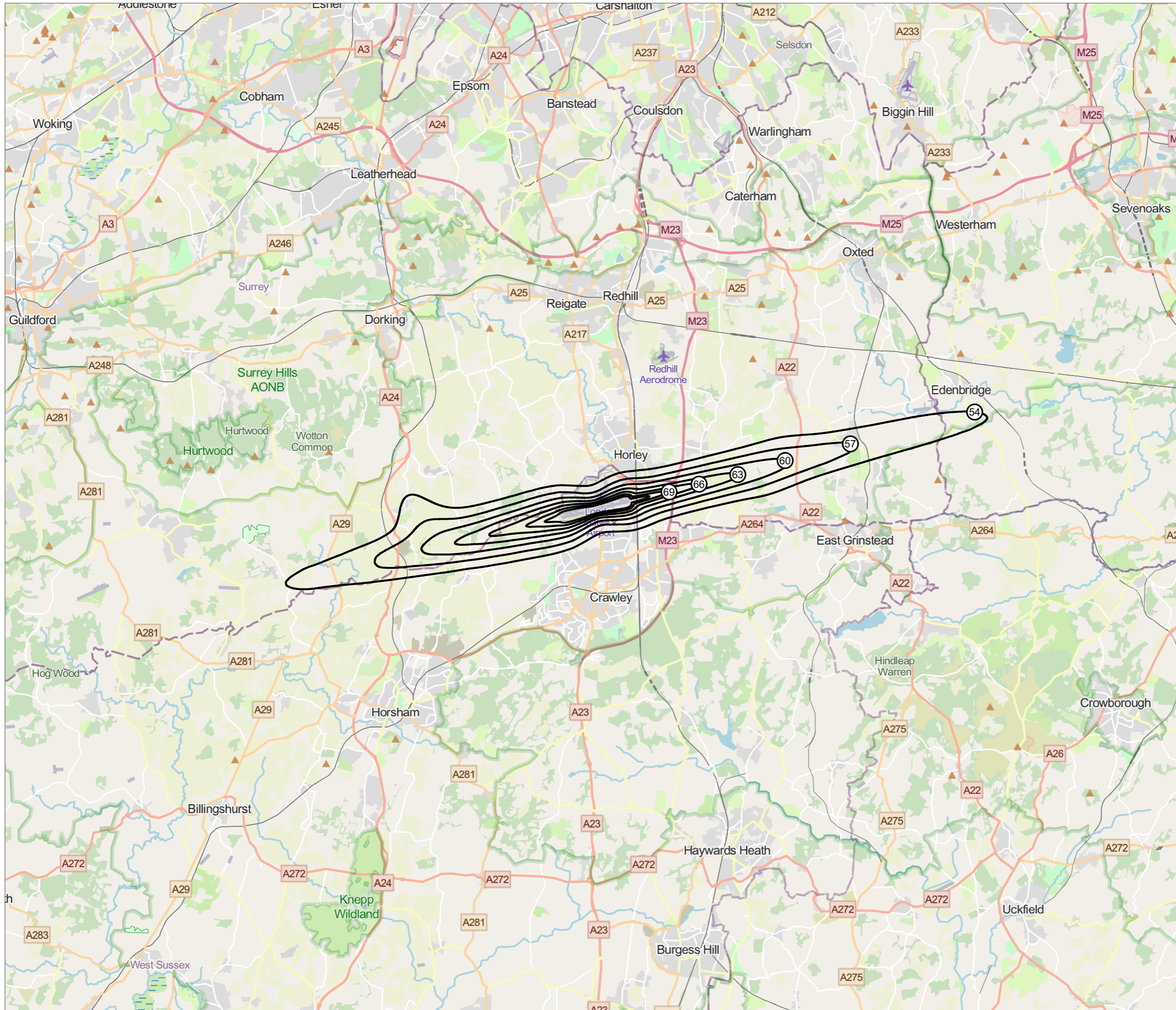
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

DOCUMENT

Environmental Statement

DRAWING TITLE

2013 Air Noise Baseline L_{eq} 16 hr

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.8

REVISION

For ES Issue

DRAWN BY

MTC

PM / CHECKED BY

SM

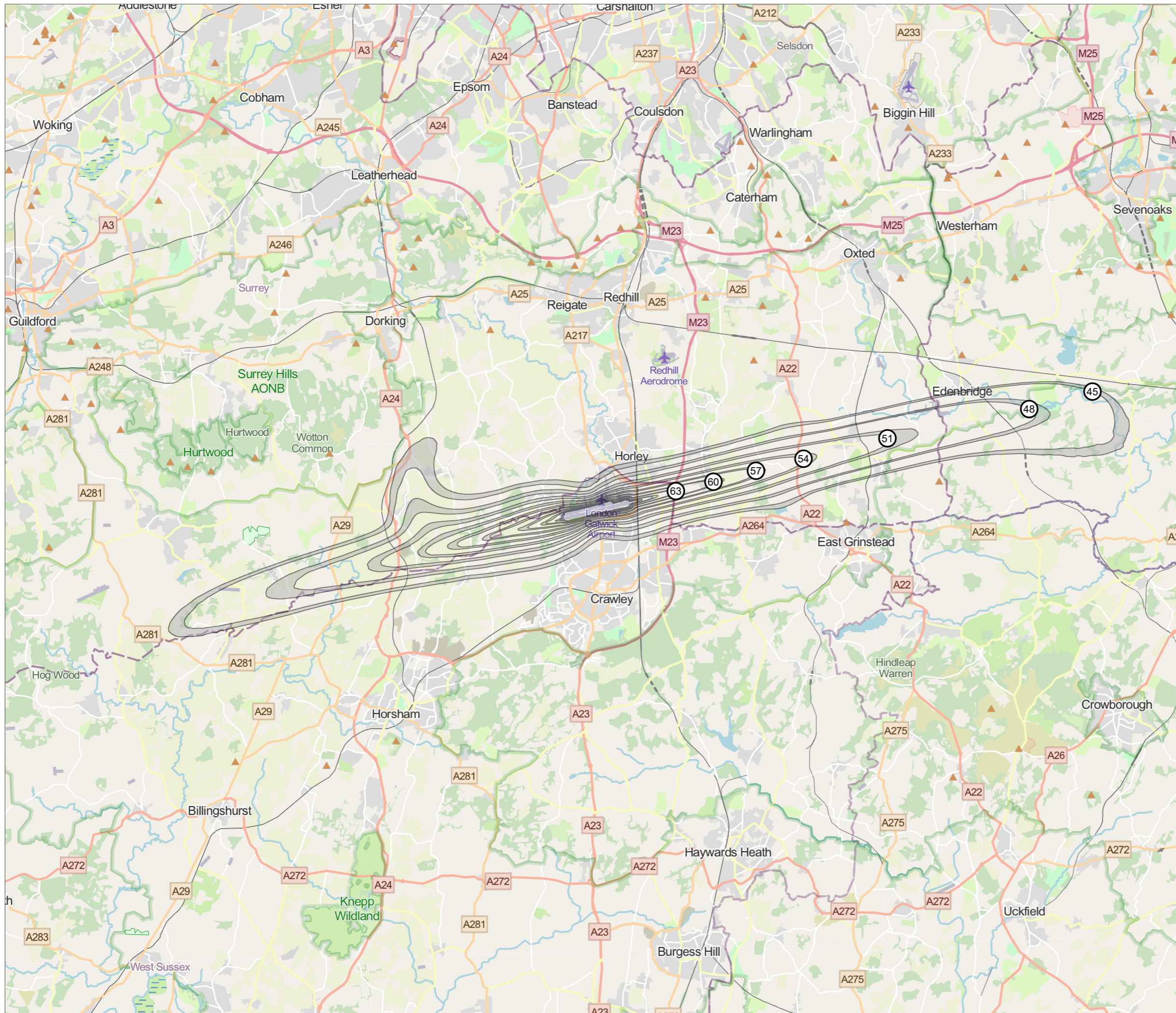
SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.

KEY

Central Case and Slower Transition Fleet Case Range



DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project, $L_{eq} 8 \text{ hr Night}$

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.9

REVISION

For ES Issue

DRAWN BY

MTC

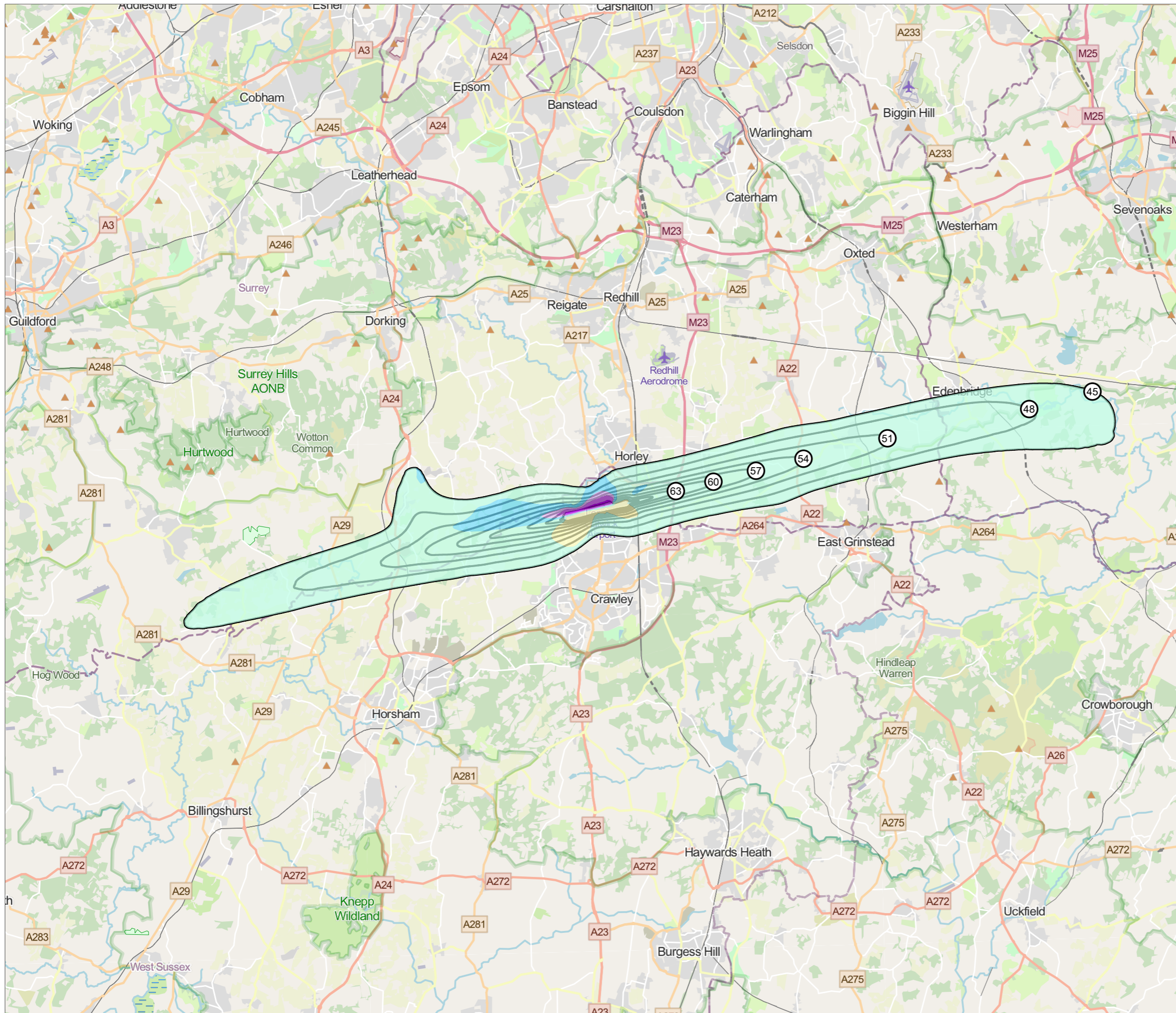
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- 1 to 0 dB decrease
- 0 to +1 dB increase
- +1 to +2 dB increase
- +2 to +3 dB increase
- +3 to +6 dB increase
- +6 to +9 dB increase
- > +9 dB increase

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project Central Case v 2032 Baseline Difference, Leq 8 hr Night

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.10

REVISION

For ES Issue

DRAWN BY

MTC

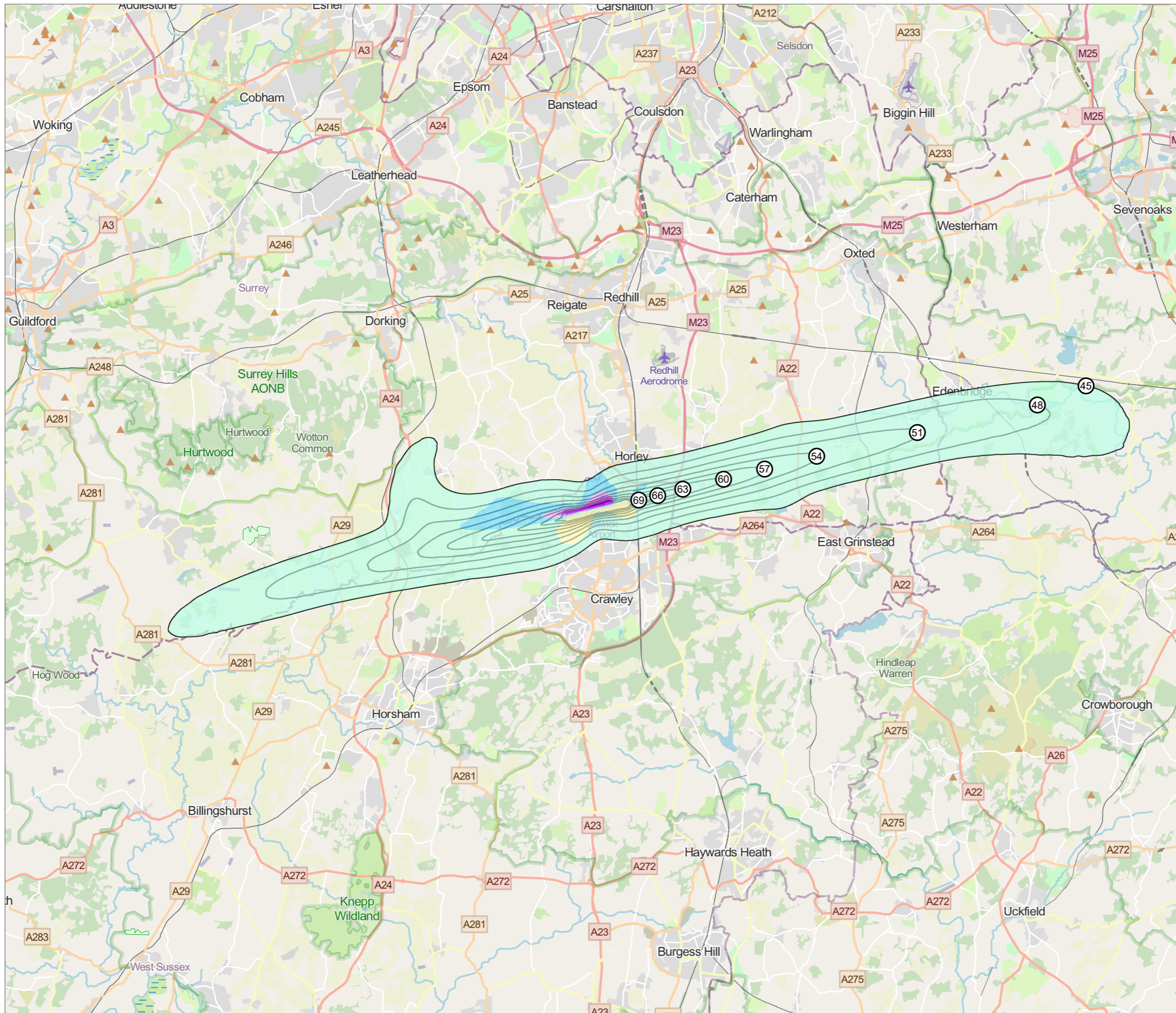
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- 1 to 0 decrease
- 0 to +1 increase
- +1 to +2 increase
- +2 to +3 increase
- +3 to +6 increase
- > +6 increase

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project Slower Transition Case v 2032 Baseline Difference, Leq 8 hr Night

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.11

REVISION

For ES Issue

DRAWN BY

MTC

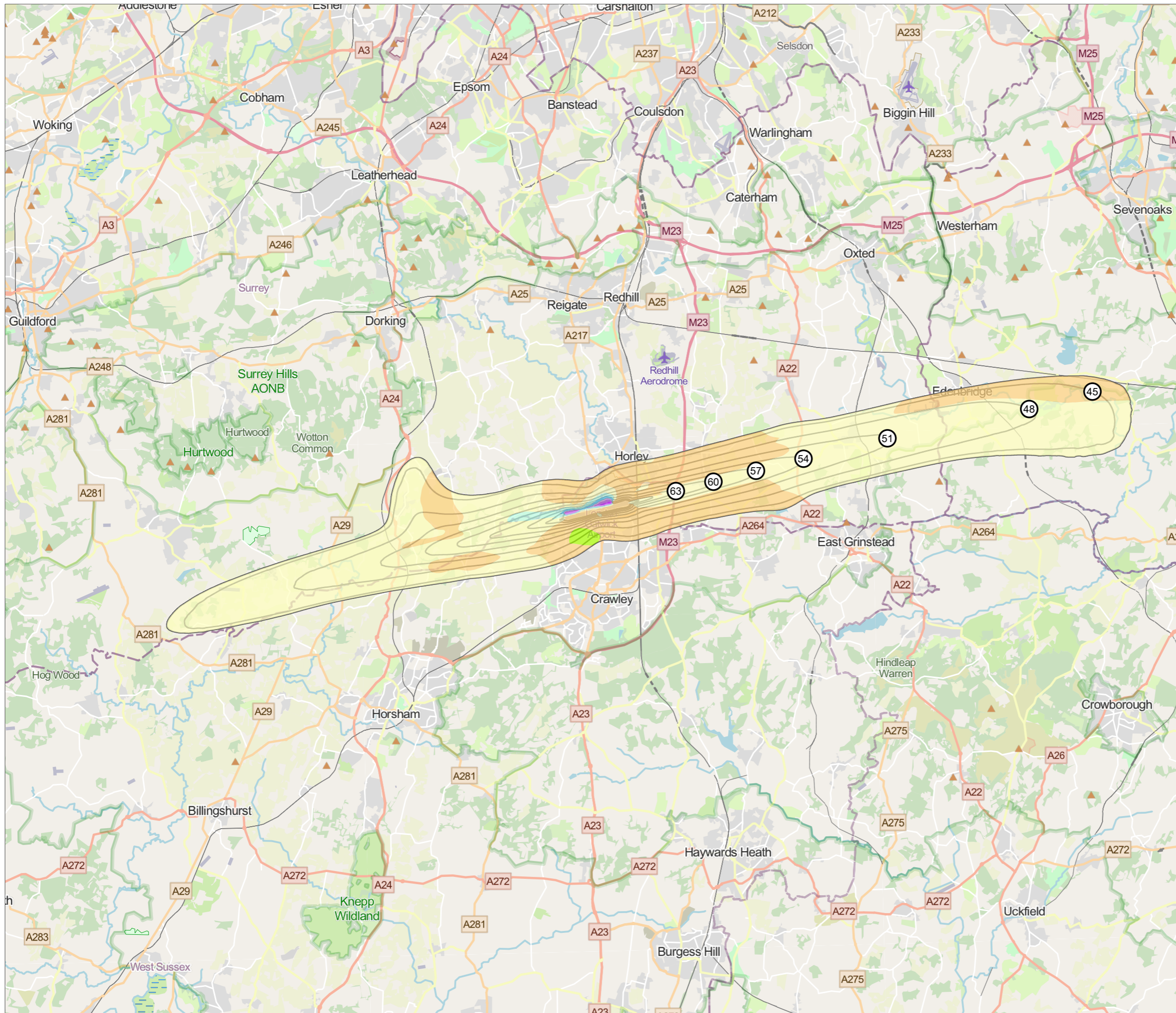
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- 3 to -2 dB decrease
- 2 to -1 dB decrease
- 1 to 0 dB decrease
- 0 to +1 dB increase
- +1 to +2 dB increase
- +2 to +3 dB increase
- +3 to +6 dB increase
- > +6 dB increase

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project Central Case v 2019 Baseline Difference, L_{eq} 8 hr Night

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.12

REVISION

For ES Issue

DRAWN BY

MTC

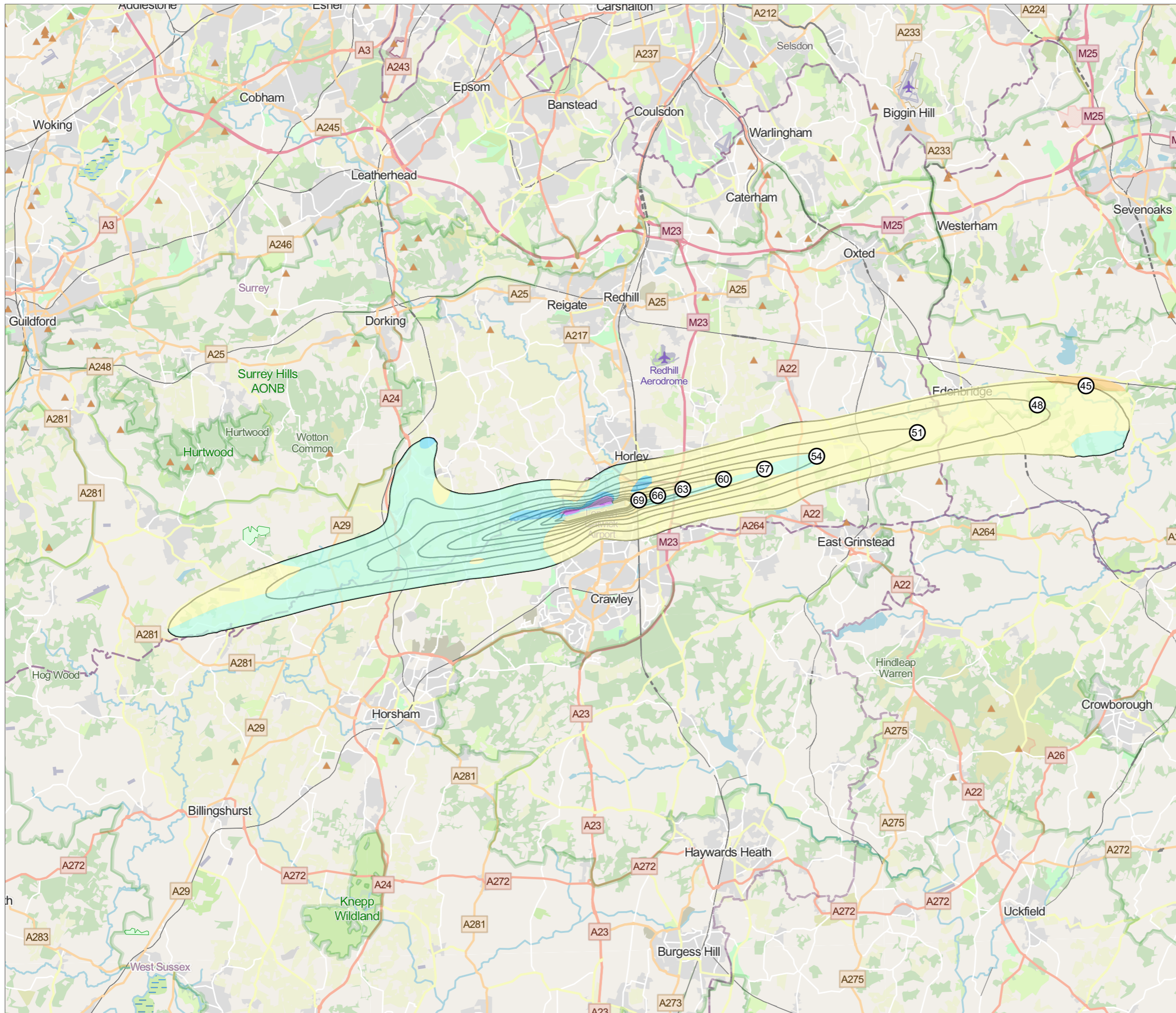
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- 2 to -1 dB decrease
- 1 to 0 dB decrease
- 0 to +1 dB increase
- +1 to +2 dB increase
- +2 to +3 dB increase
- +3 to +6 dB increase

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project Slower Transition Case v 2019 Baseline Difference, L_{eq} 8 hr Night

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.13

REVISION

For ES Issue

DRAWN BY

MTC

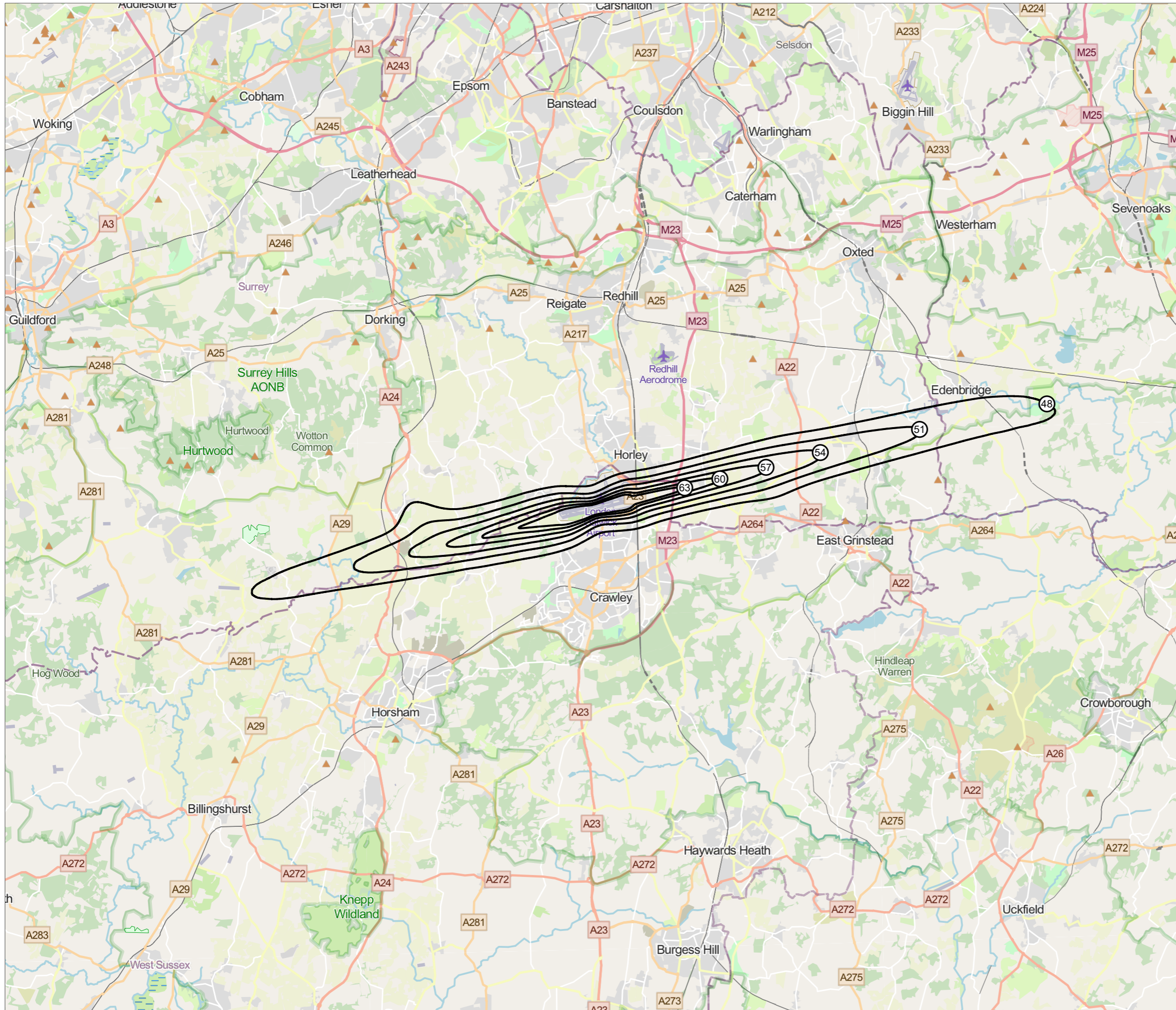
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

DOCUMENT

Environmental Statement

DRAWING TITLE

2013 Air Noise Baseline L_{eq} 8 hr Night

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.14

REVISION

For ES Issue

DRAWN BY

MTC

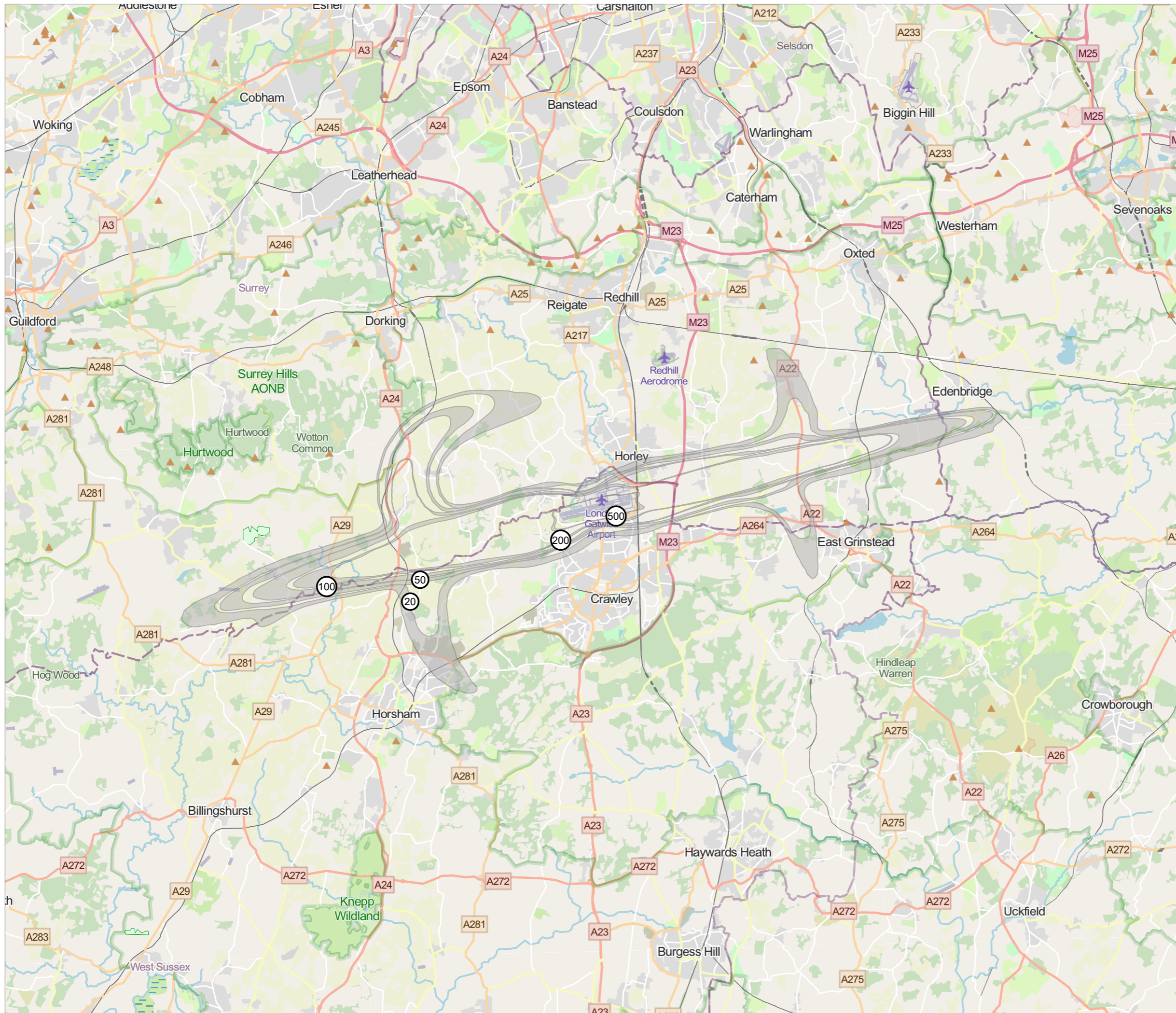
PM / CHECKED BY

SM

SCALE @ A3 1:175,000

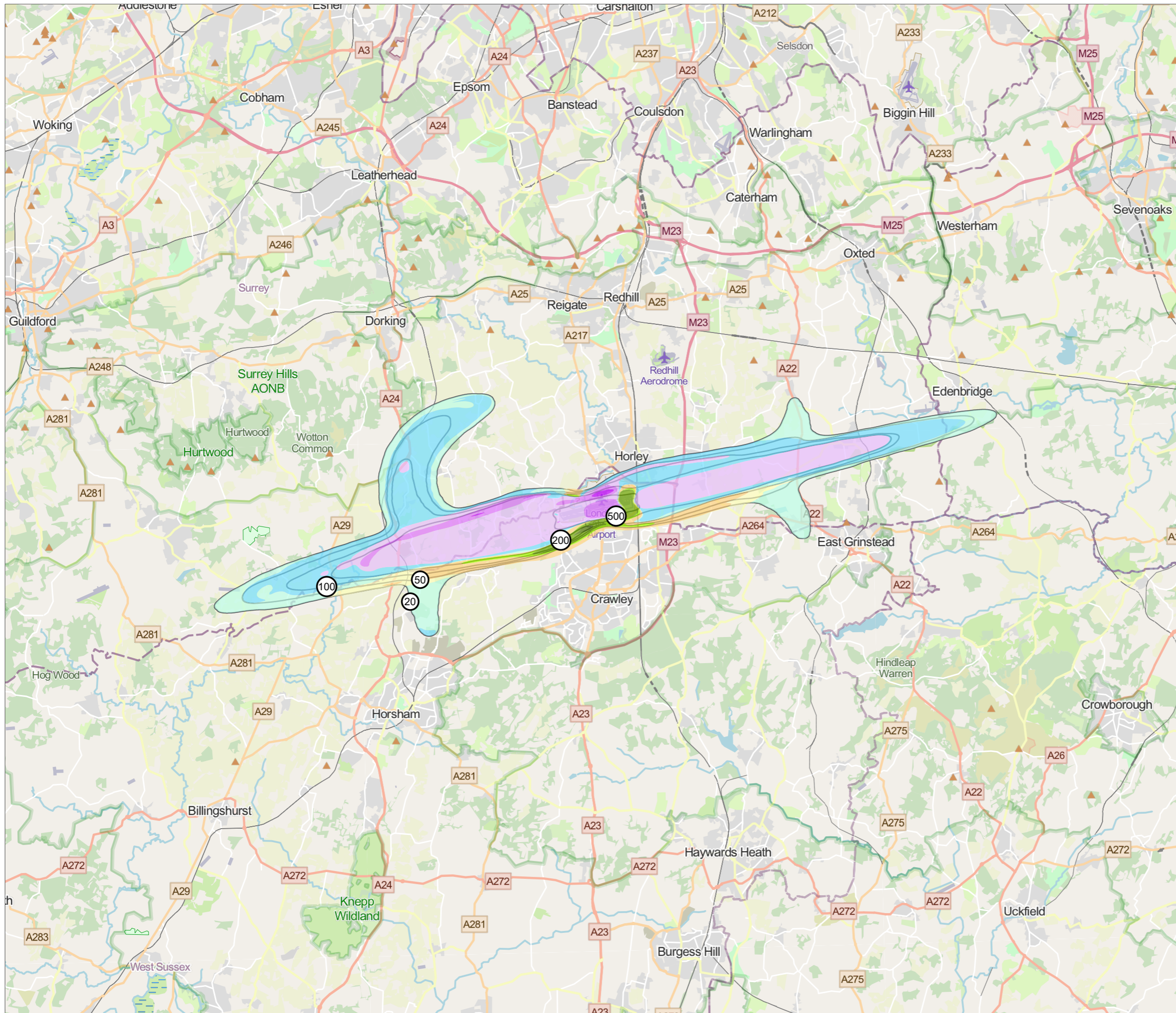


Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY
 [Grey shaded area] Central Case and Slower Transition Fleet Case Range

DOCUMENT		
Environmental Statement		
DRAWING TITLE		
2032 Air Noise with Project N65 Day		
DATE		
July 2023		
ORIENTATION 	DRAWING NO.	REVISION
	14.9.15	For ES Issue
	DRAWN BY	PM / CHECKED BY
	MTC	SM
SCALE @ A3 1:175,000		
<small>Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492. © Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.</small>		



KEY

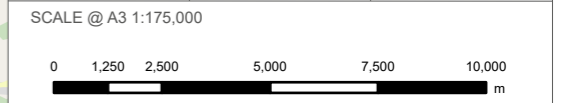
	-300 to -200 decrease
	-200 to -100 decrease
	-100 to -50 decrease
	-50 to -10 decrease
	-10 to 0 decrease
	0 to +10 increase
	+10 to +50 increase
	+50 to +100 increase
	+100 to +200 increase
	+200 to +300 increase

DOCUMENT
Environmental Statement

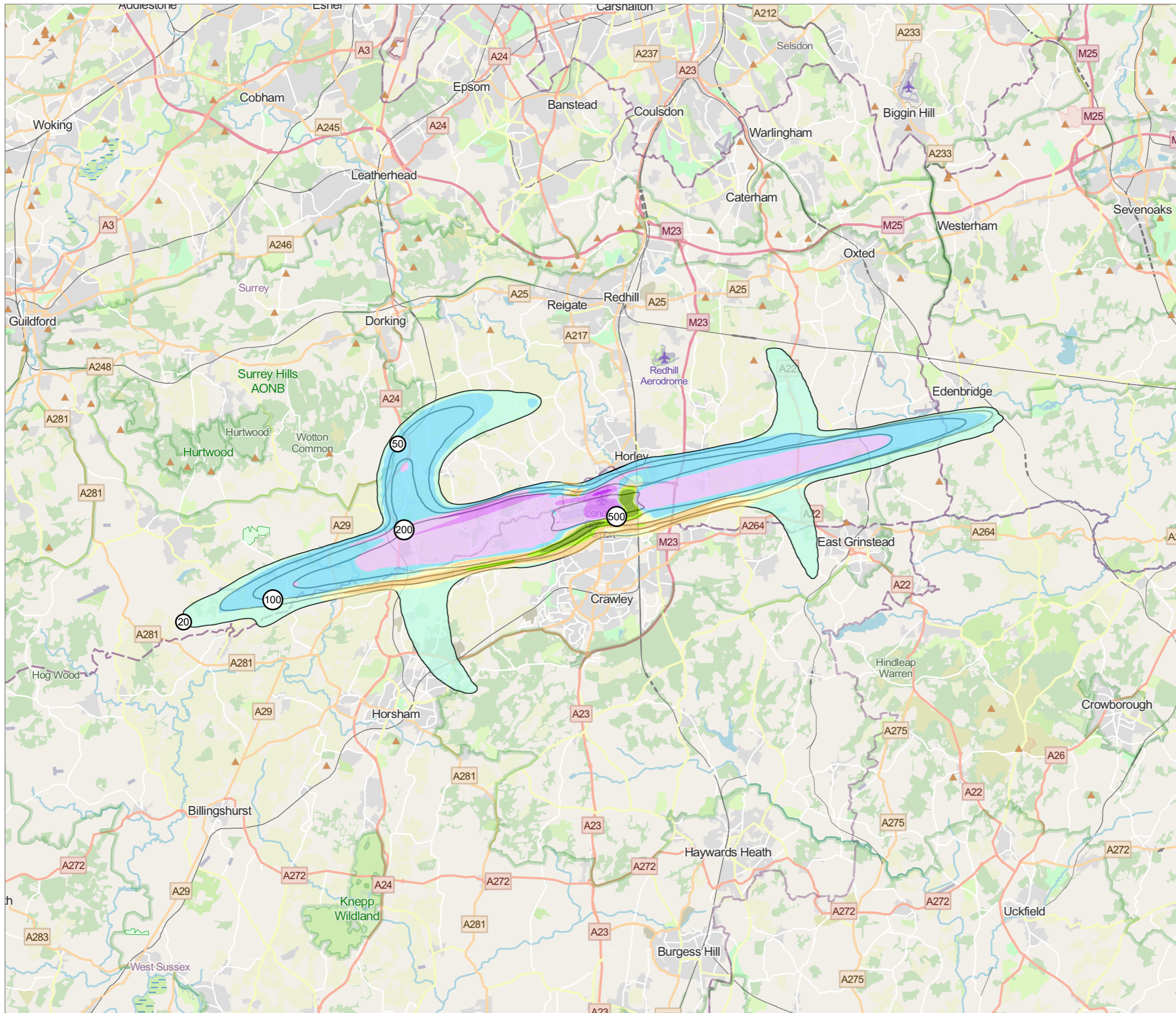
DRAWING TITLE
2032 Air Noise with Project Central Case v 2032 Baseline Difference N65 Day

DATE
July 2023

ORIENTATION 	DRAWING NO. 14.9.16	REVISION For ES Issue
	DRAWN BY MTC	PM / CHECKED BY SM



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- 300 to -200 decrease
- 200 to -100 decrease
- 100 to -50 decrease
- 50 to -10 decrease
- 10 to 0 decrease
- 0 to +10 increase
- +10 to +50 increase
- +50 to +100 increase
- +100 to +200 increase
- +200 to +300 increase

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project Slower Transition Case v 2032 Baseline Difference N65 Day

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.17

REVISION

For ES Issue

DRAWN BY

MTC

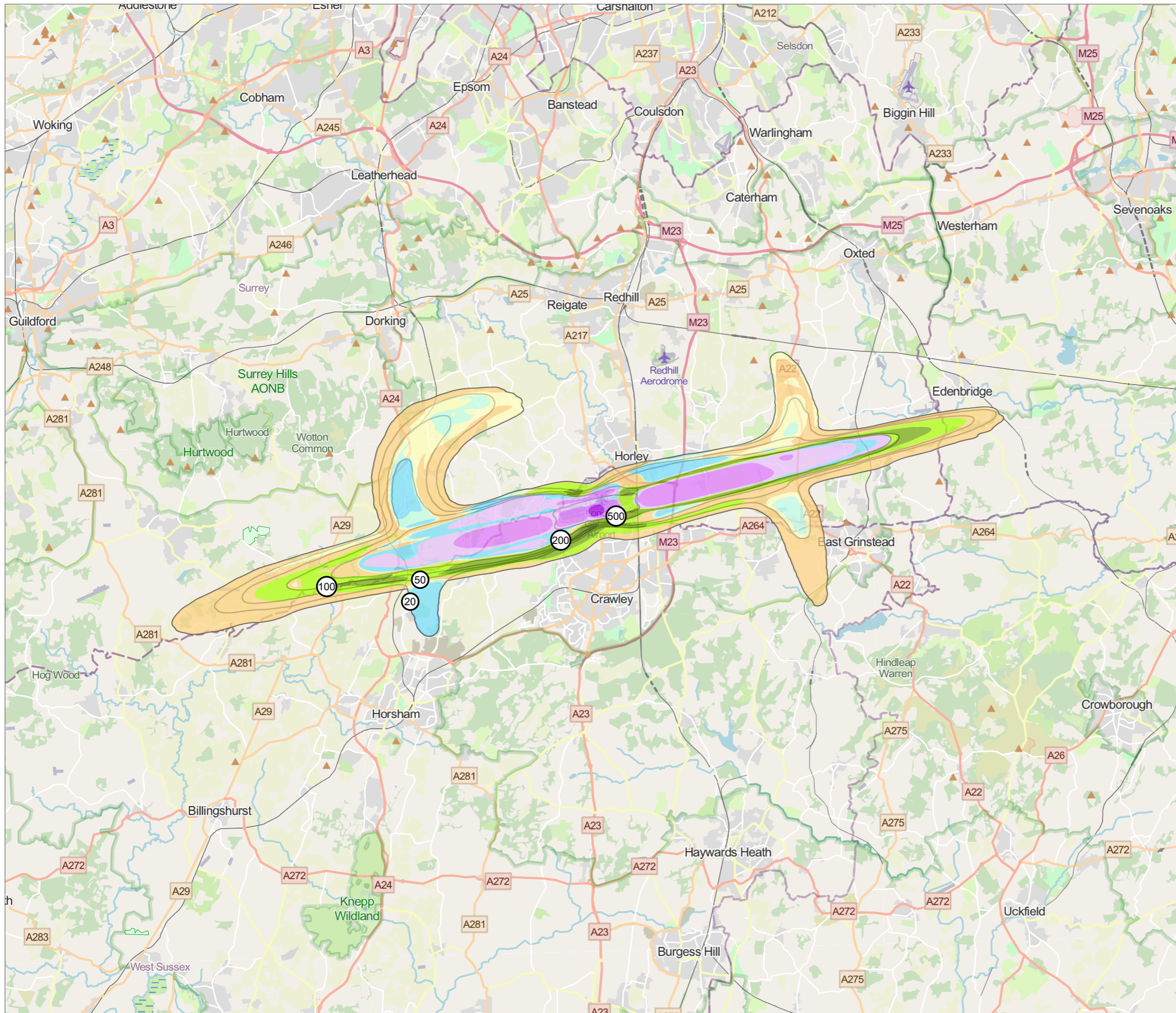
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- < -200 decrease
- 200 to -100 decrease
- 100 to -50 decrease
- 50 to -10 decrease
- 10 to 0 decrease
- 0 to +10 increase
- +10 to +50 increase
- +50 to +100 increase
- +100 to +200 increase
- +200 to +300 increase

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project Central Case v 2019 Baseline Difference N65 Day

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.18

REVISION

For ES Issue

DRAWN BY

MTC

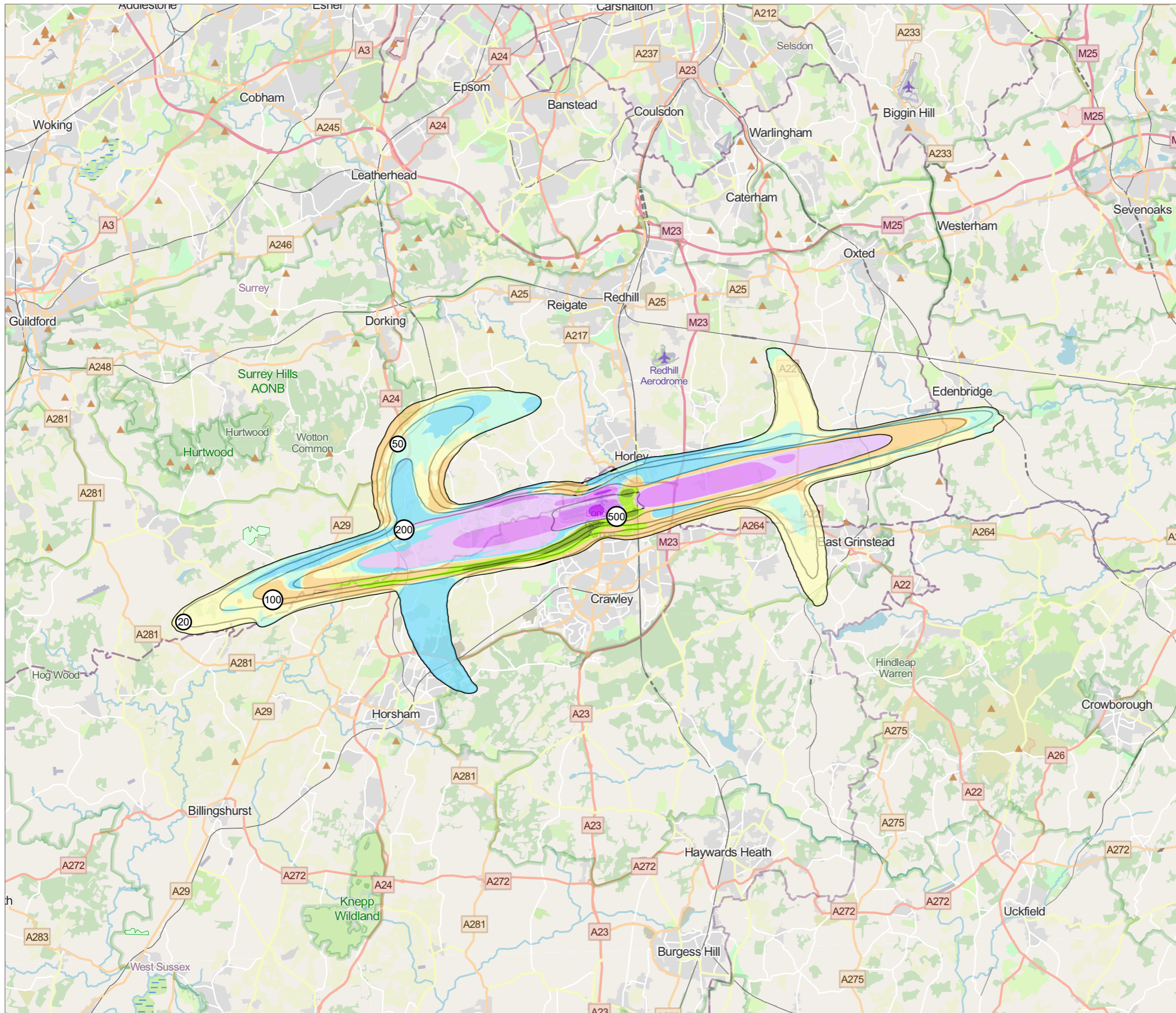
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- 300 to -200 decrease
- 200 to -100 decrease
- 100 to -50 decrease
- 50 to -10 decrease
- 10 to 0 decrease
- 0 to +10 increase
- +10 to +50 increase
- +50 to +100 increase
- +100 to +200 increase
- +200 to +300 increase

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project Slower Transition Case v 2019 Baseline Difference N65 Day

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.19

REVISION

For ES Issue

DRAWN BY

MTC

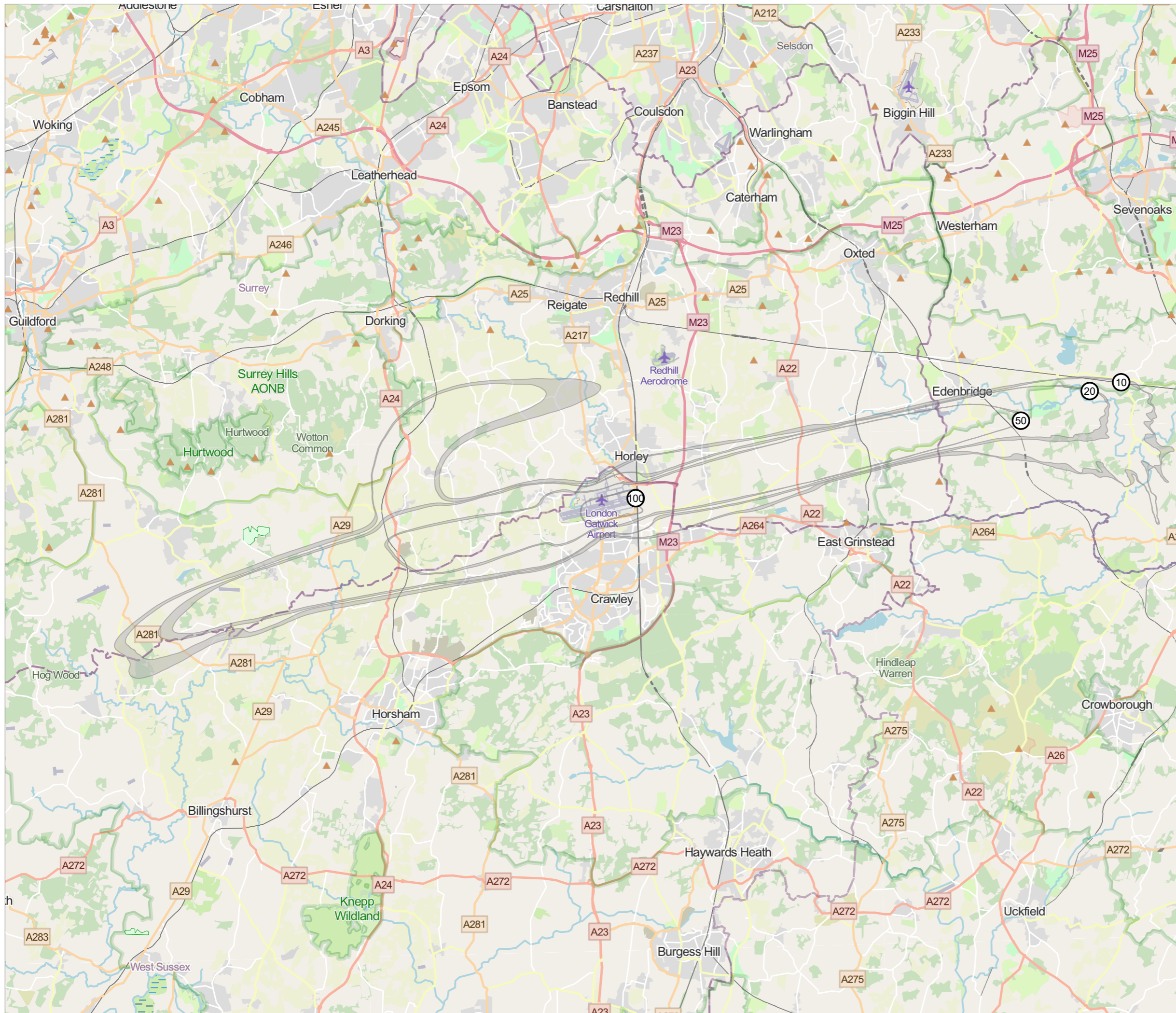
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



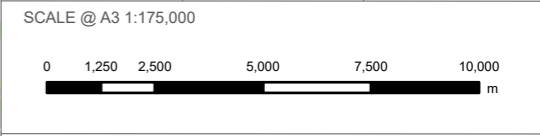
KEY
 [Grey shaded area] Central Case and Slower Transition Fleet Case Range

DOCUMENT
Environmental Statement

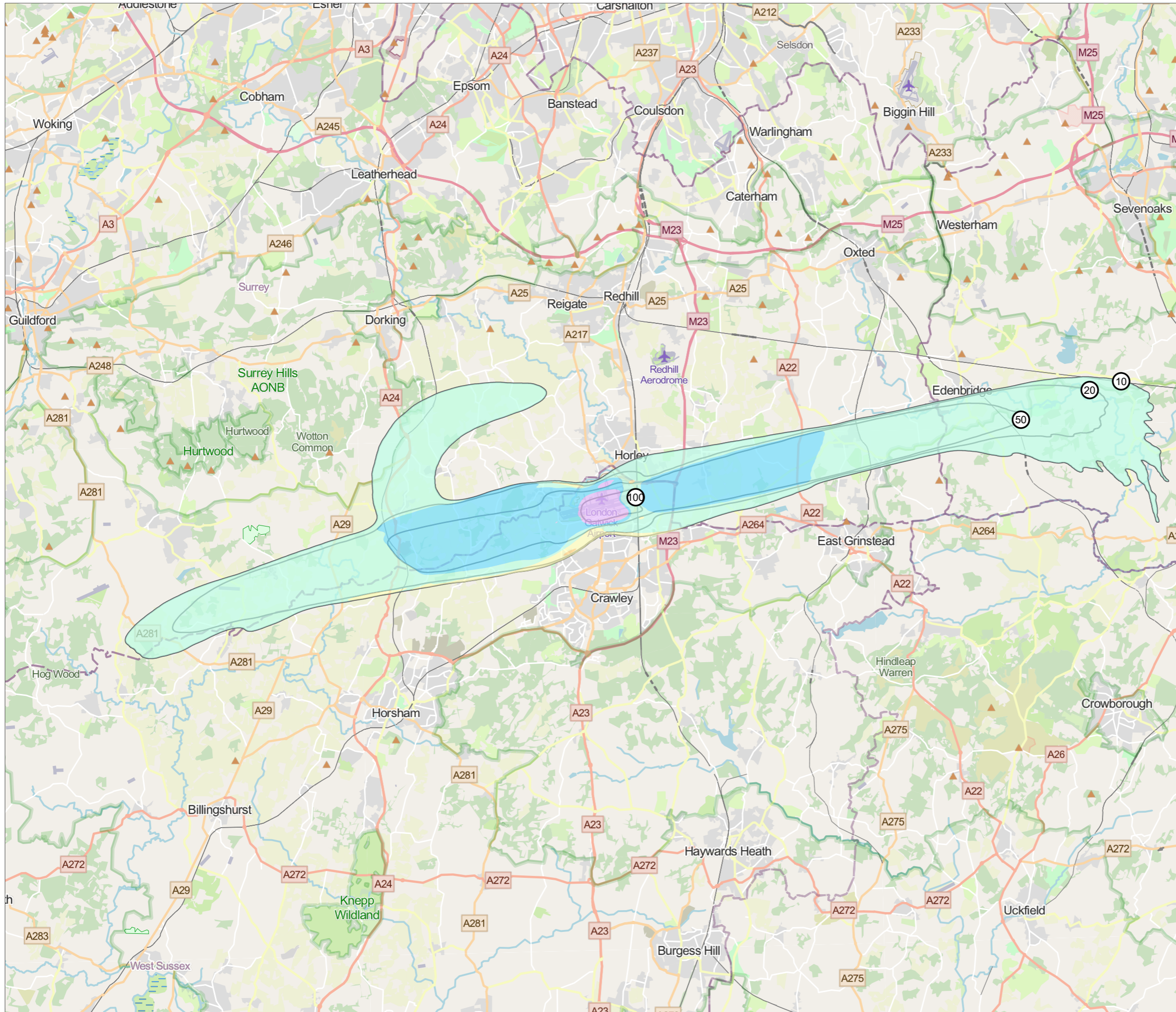
DRAWING TITLE
2032 Air Noise with Project N60 Night

DATE
July 2023

ORIENTATION 	DRAWING NO. 14.9.20	REVISION For ES Issue
	DRAWN BY MTC	PM / CHECKED BY SM



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
 © Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- 10 to -5 decrease
- 5 to 0 decrease
- 0 to +5 increase
- +5 to +10 increase
- +10 to +15 increase

DOCUMENT

Environmental Statement

DRAWING TITLE

**2032 Air Noise with Project Central Case v
2032 Baseline Difference N60 Night**

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.21

REVISION

**For ES
Issue**

DRAWN BY

MTC

PM / CHECKED BY

SM

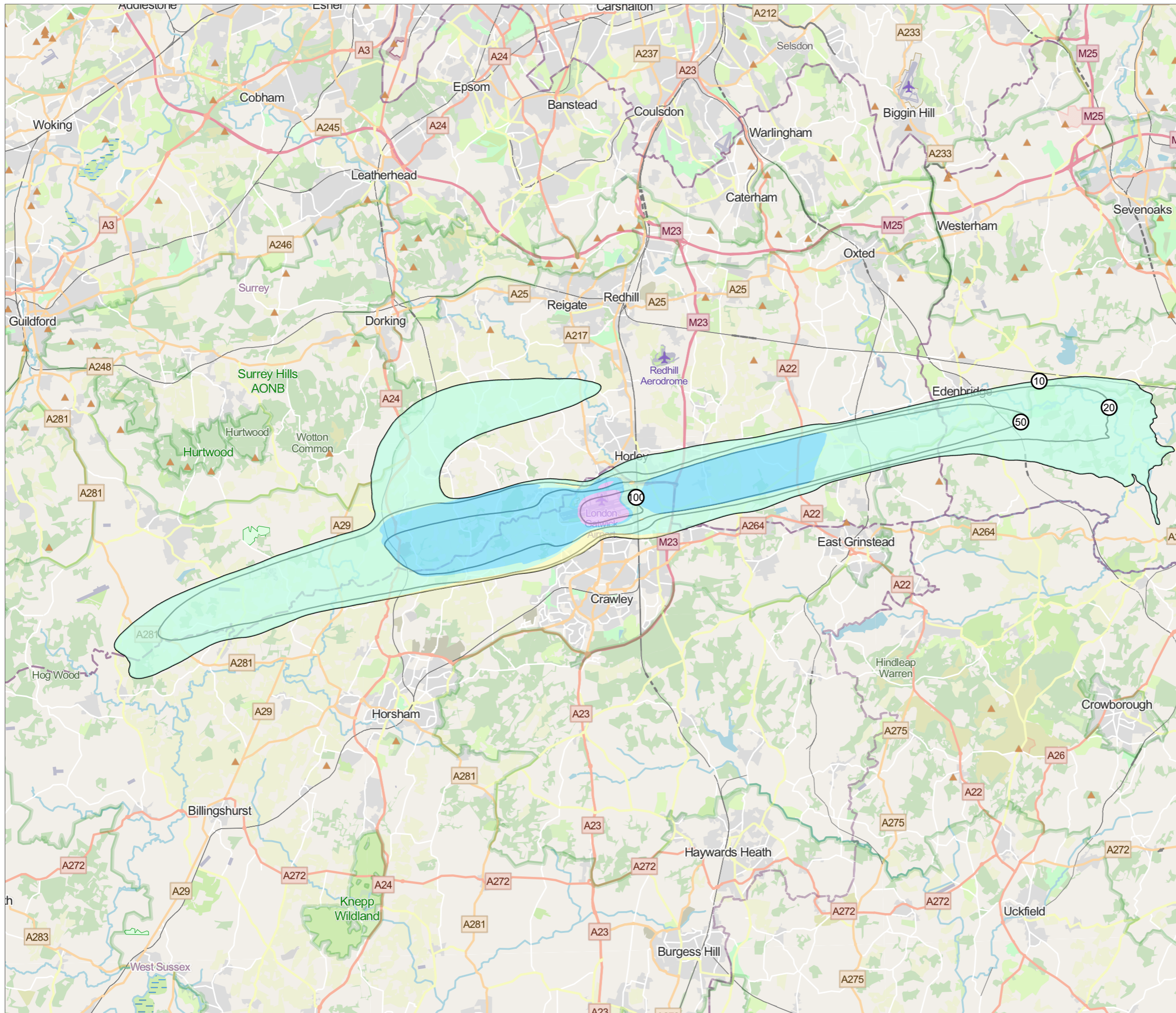
SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.

KEY

- 5 to 0 dB decrease
- 0 to +5 dB increase
- +5 to 10 dB increase
- +10 to +15 dB increase



DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project Slower Transition Case v 2032 Baseline Difference N60 Night

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.22

REVISION

For ES Issue

DRAWN BY

MTC

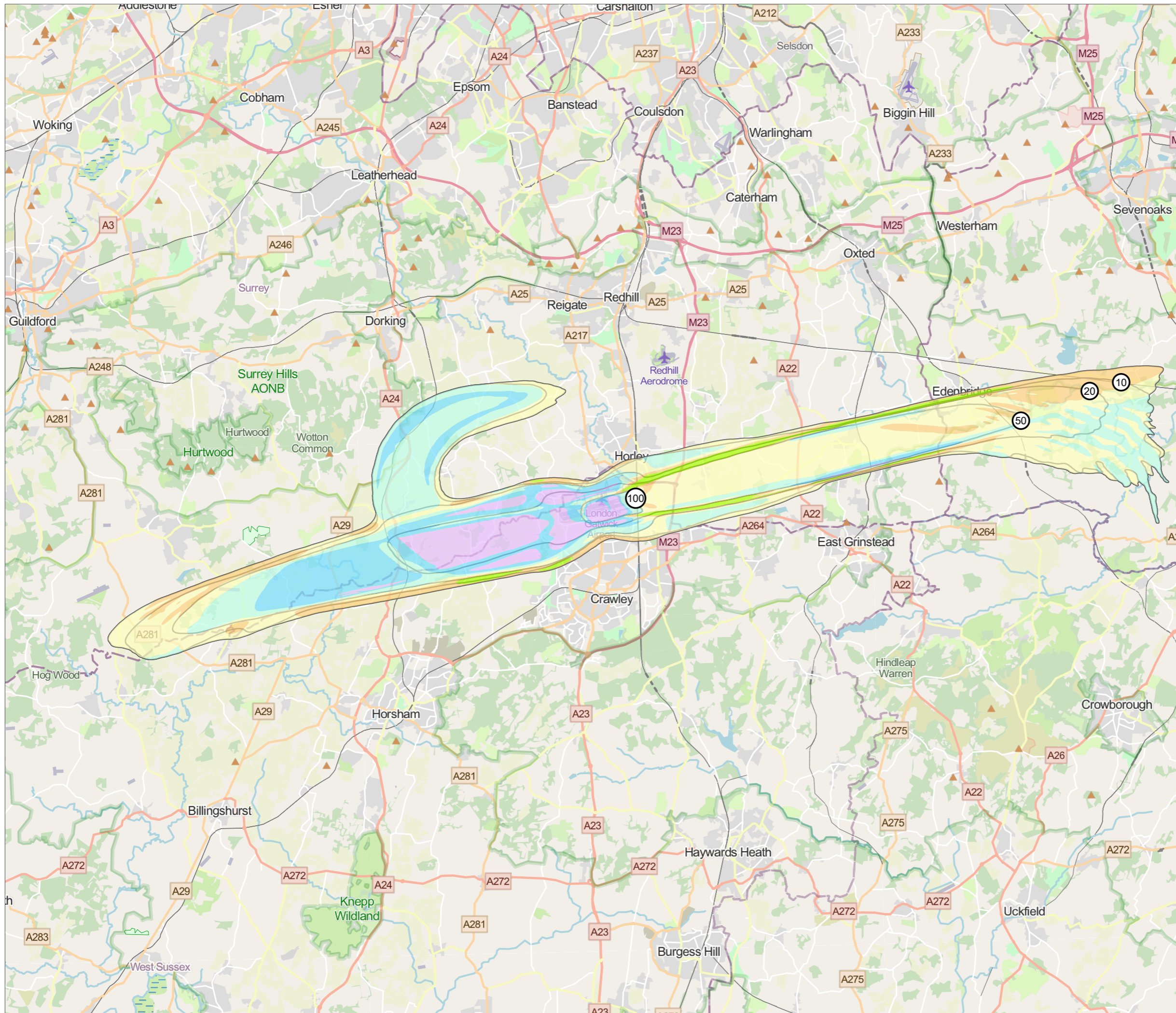
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- 50 to -10 decrease
- 10 to -5 decrease
- 5 to 0 decrease
- 0 to +5 increase
- +5 to +10 increase
- +10 to +50 increase

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project Central Case v 2019 Baseline Difference N60 Night

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.23

REVISION

For ES Issue

DRAWN BY

MTC

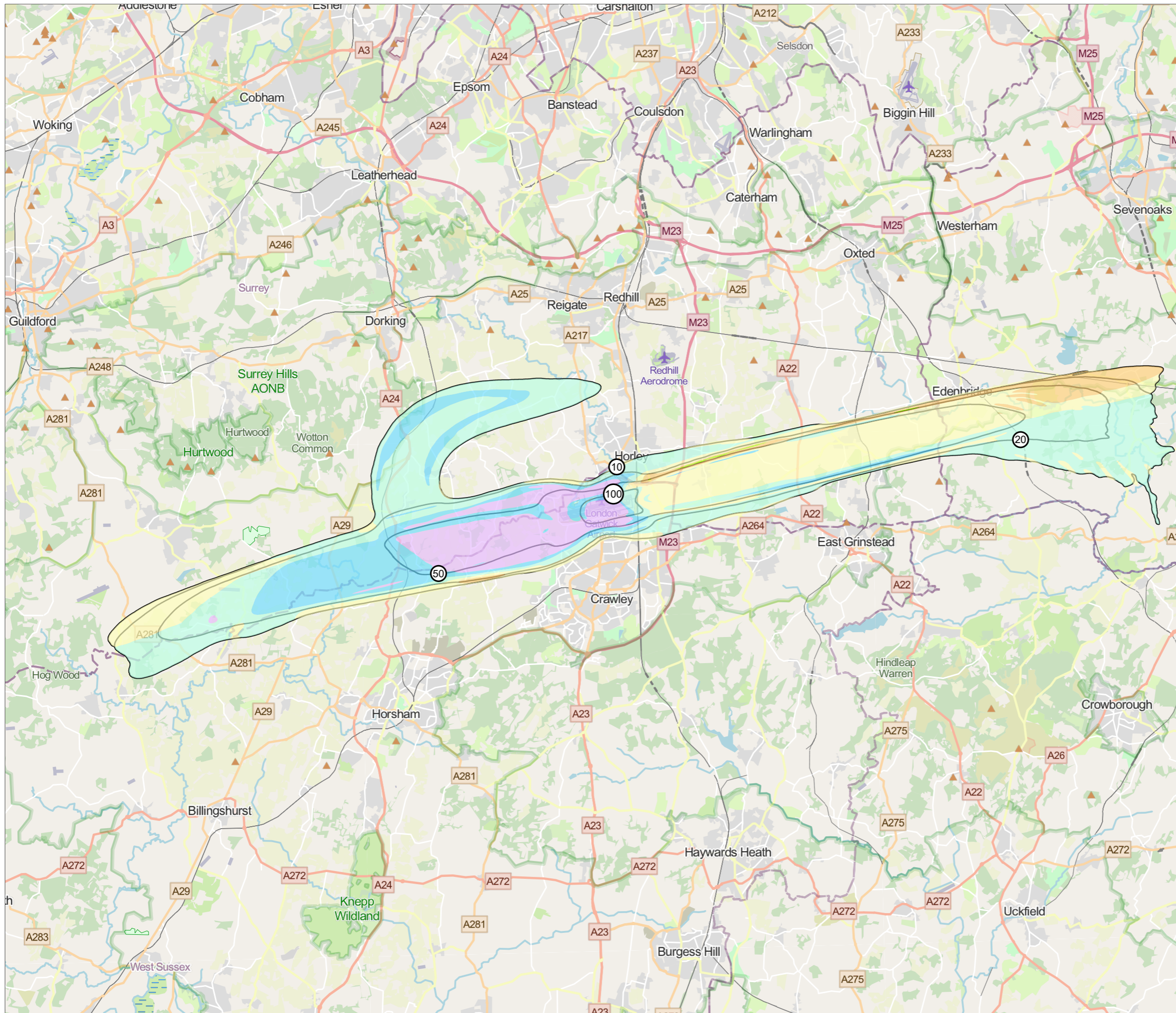
PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492. © Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.



KEY

- 50 to -10 decrease
- 10 to -5 decrease
- 5 to 0 decrease
- 0 to +5 increase
- +5 to +10 increase
- +10 to +50 increase

DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise with Project Slower Transitions Case v 2019 Baseline Difference N60 Night

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.24

REVISION

For ES Issue

DRAWN BY

MTC

PM / CHECKED BY

SM

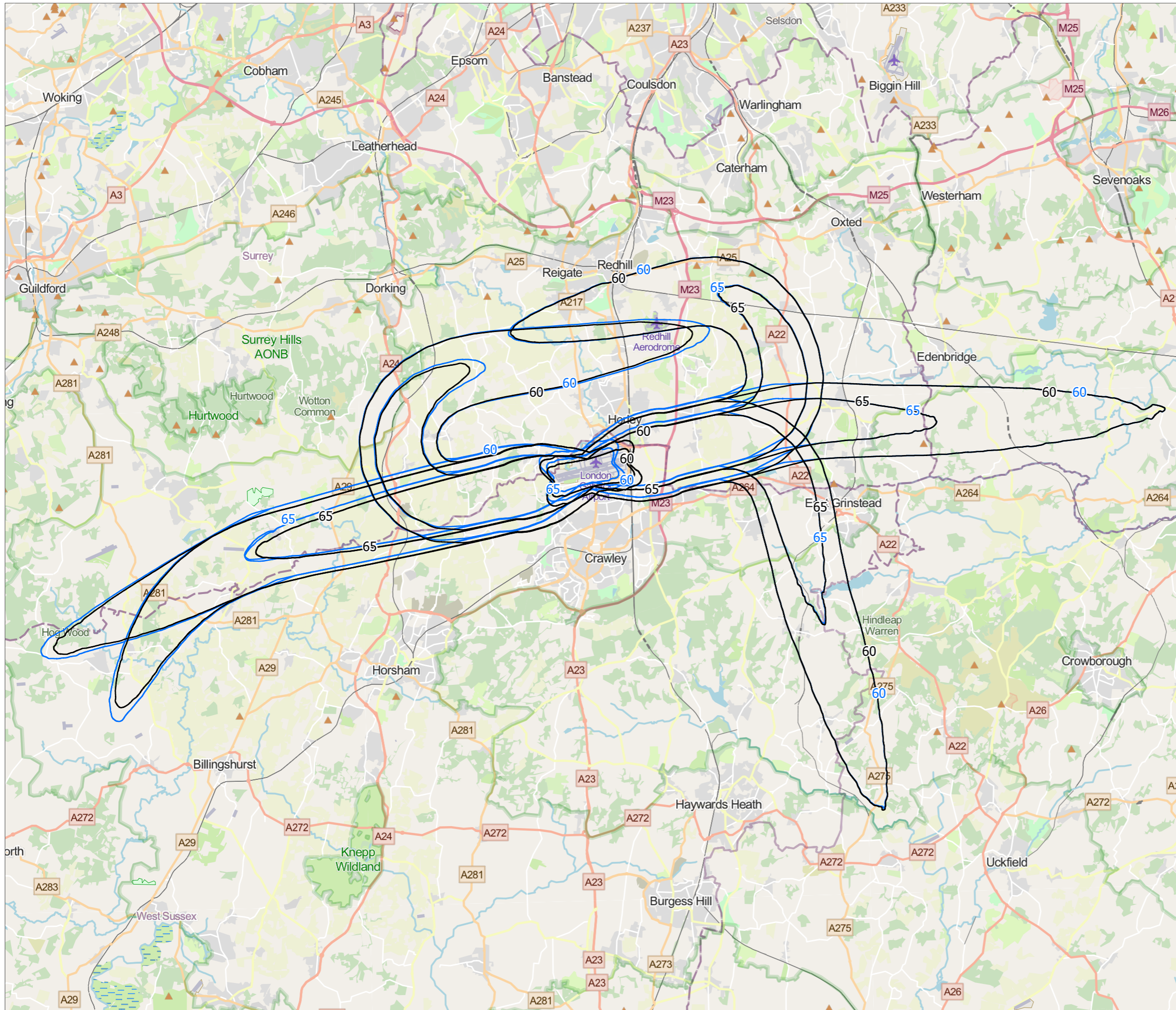
SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.

KEY

- Main Runway
- Northern Runway



DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise Baseline and Northern Runway A320 L_{max} 60 and 65dB Footprints

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.25

REVISION

For ES Issue

DRAWN BY

MTC

PM / CHECKED BY

SM

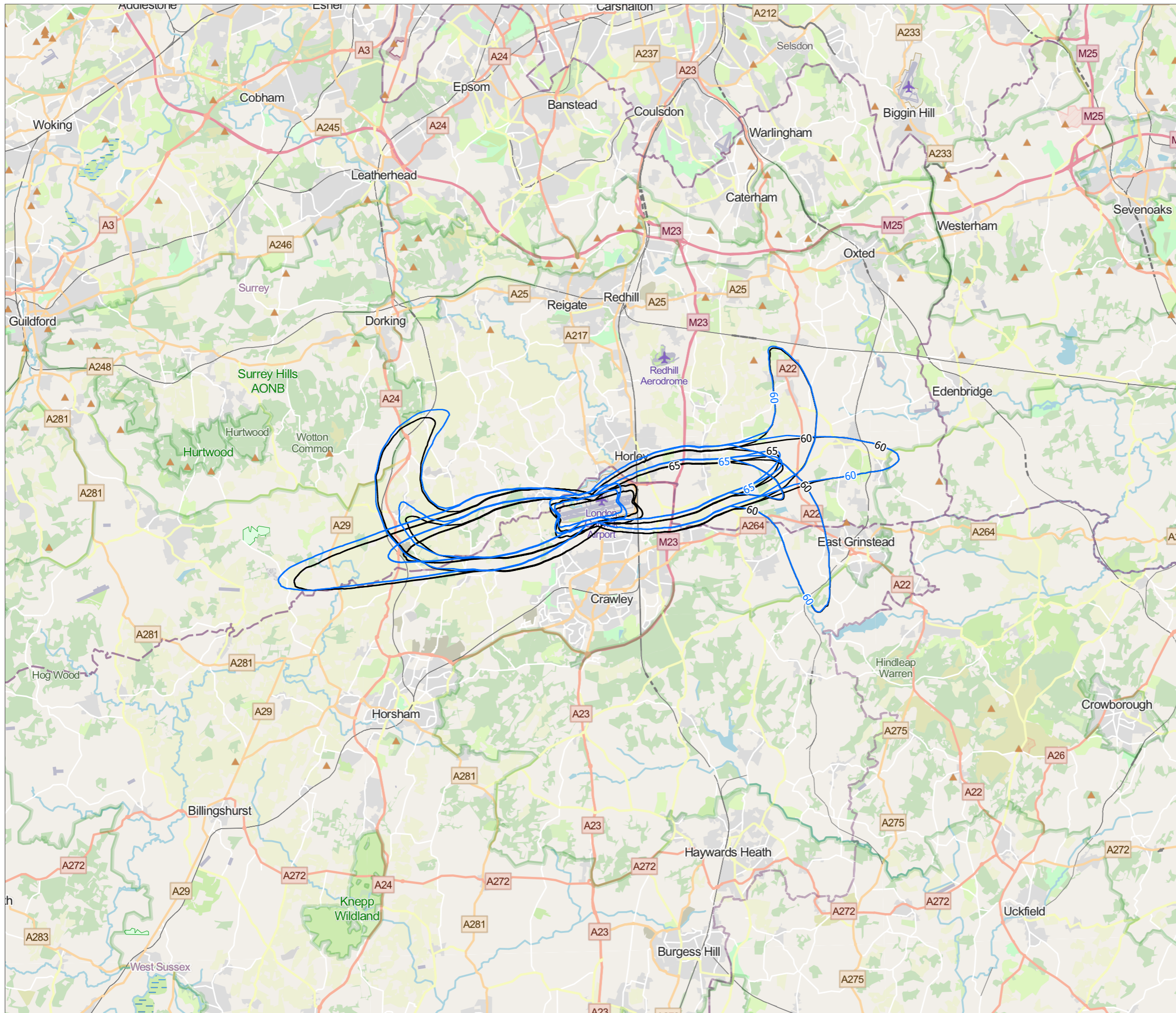
SCALE @ A3 1:180,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.

KEY

- Main Runway
- Northern Runway



DOCUMENT

Environmental Statement

DRAWING TITLE

2032 Air Noise Baseline and Northern Runway A320 Neo L_{max} 60 and 65dB Footprints

DATE

July 2023

ORIENTATION



DRAWING NO.

14.9.26

REVISION

For ES Issue

DRAWN BY

MTC

PM / CHECKED BY

SM

SCALE @ A3 1:175,000



Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2023). License number 0100031673, 10001998, 100048492.
© Copyright 2023 Gatwick Airport Limited. No part of this drawing is to be reproduced without prior permission of Gatwick Airport Limited.