

- ★ Existing HOAC Site
- ♦ Schools and Groups
- ◆ Individual Memberships
- London Borough of Hillingdon
- 10km buffer ASA
- 20km buffer

**HOAC Users**

0

2.25


4.5

Kilometers

April 2025

Created by: Quod

Scale: 1:200,000 @ A4



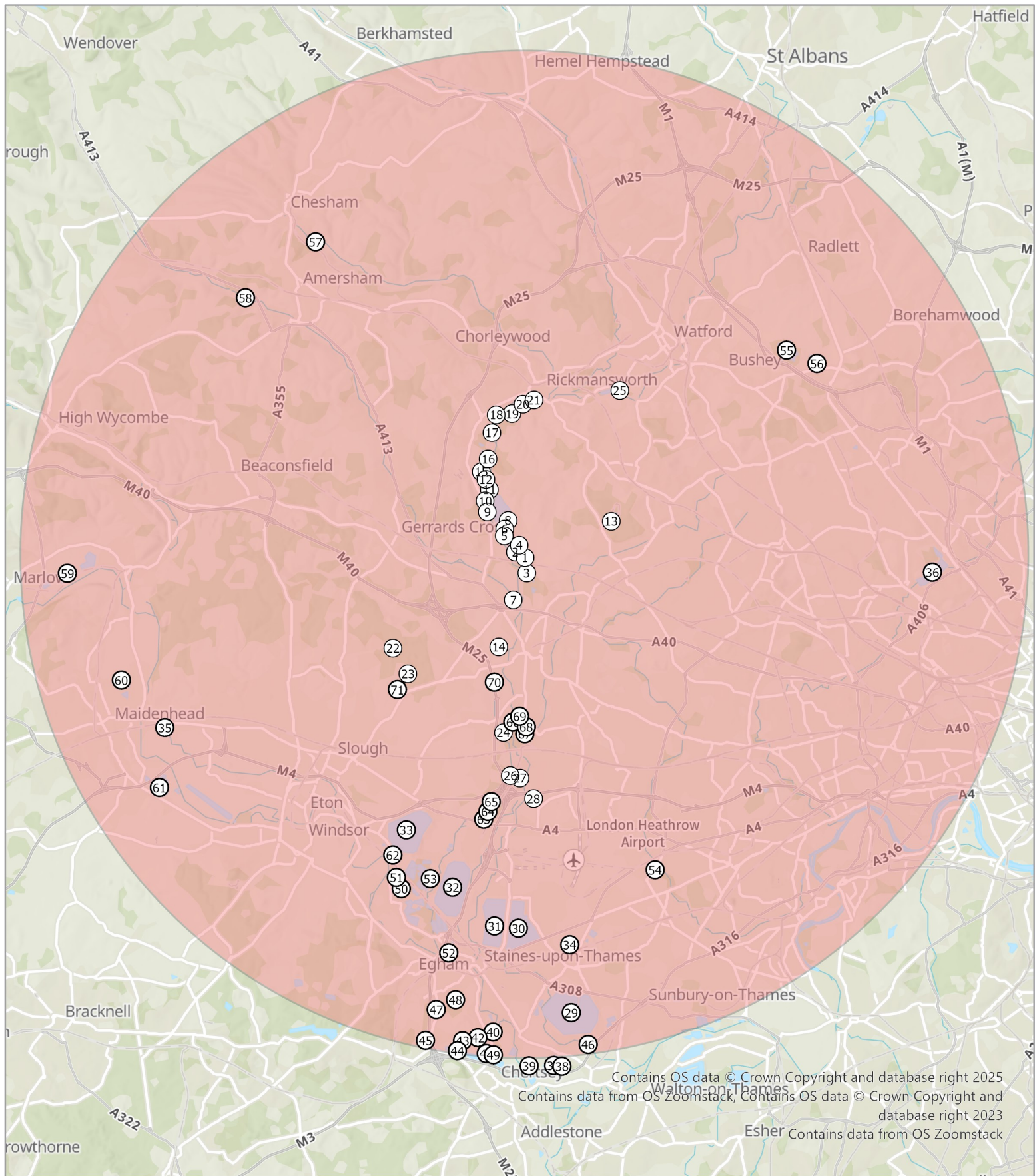
Quod

21 Soho Square  
London  
W1D 3QP

020 3597 1000  
[www.quod.com](http://www.quod.com)

## Appendix 6 – Map of 20-kilometre search area





Legend

- Study Area
- Longlist Sites



Date: May 2025

Scale: 1:200,000 @ A4



21 Soho Square  
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W1D 4NR

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Longlist of Sites Location Map

## Appendix 7 – Noise and Air Quality Assessment of longlist sites





# HWSFAC

Alternative Sites - Noise

12 June 2025

# Introduction

Noise Screening Methodology

Site-by-site Review



# NOISE SCREENING METHODOLOGY

# Initial Criteria

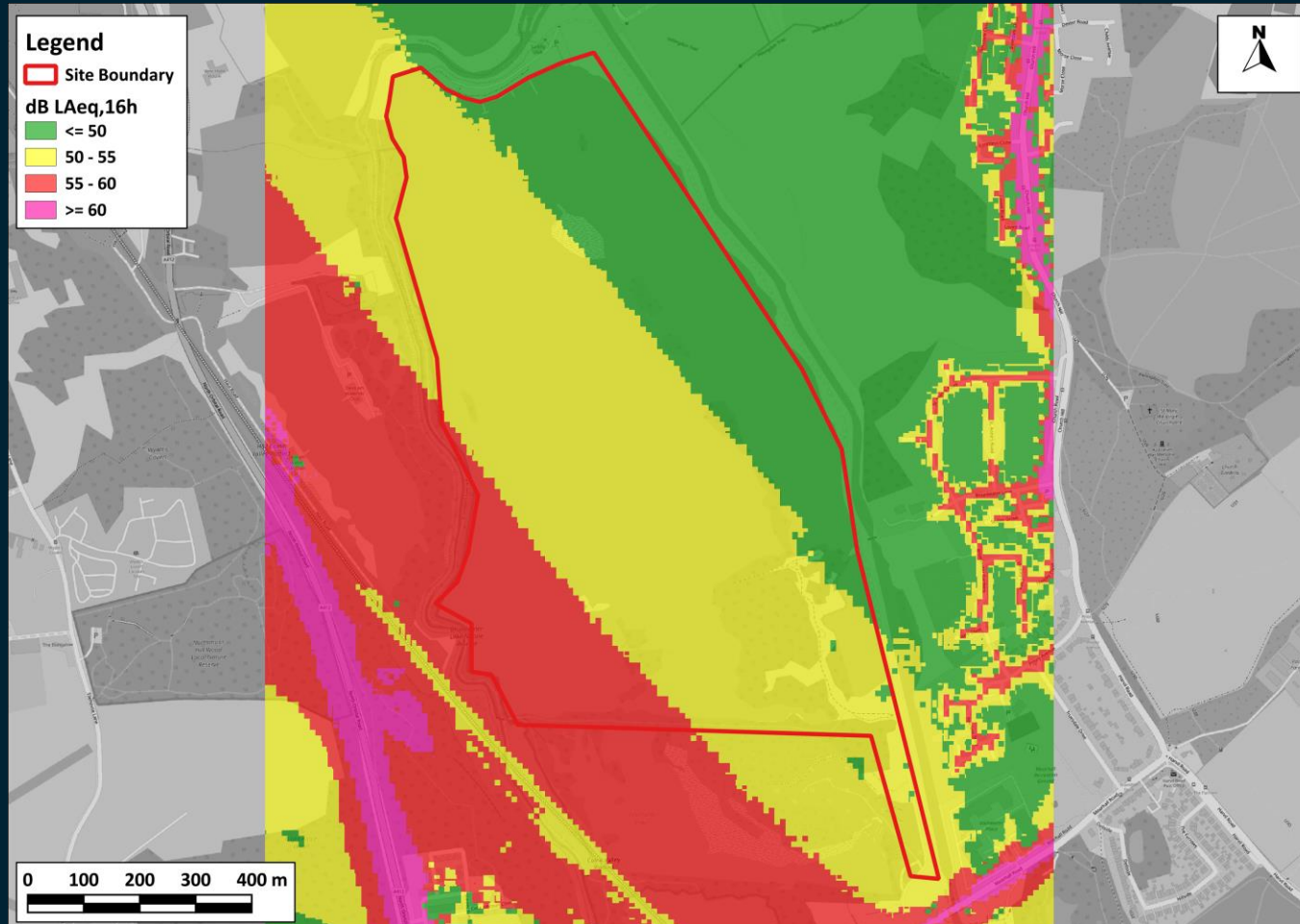
- NCL have utilised publicly available sources of noise mapping data in GIS software to evaluate noise constraints at each of the 34 identified alternative sites. Data sources include:
  - DEFRA Round 4 Strategic Noise Mapping (road traffic and railway noise)<sup>1</sup>
  - Heathrow Noise Contours<sup>2</sup>
- Upper screening criteria - An initial screening criterion of 55 dB  $L_{Aeq,16h}$  has been adopted in relation to the main waterbody having regards to safety in respect of verbal communication from instructors etc.
- Lower screening criteria - For sites which are predominantly below 55 dB  $L_{Aeq,16h}$ , further consideration was given the provision of a reasonably sized area below 50 dB  $L_{Aeq,16h}$  for outdoor teaching and communication purposes, as well as any specific hearing-related sensitivities. Consideration has also been given to adjacent land areas however ownership and other constraints would need to be considered by others.
- These criteria generally accord with the Acoustics of Schools: A Design Guide which states “noise levels in unoccupied playgrounds, playing fields and other outdoor areas should not exceed 55 dB  $L_{Aeq,30min}$  and there should be at least one area suitable for outdoor teaching activities where noise levels are below 50 dB  $L_{Aeq,30min}$ ”.

<sup>1</sup> <https://www.gov.uk/government/publications/strategic-noise-mapping-2022>

<sup>2</sup> <https://www.heathrow.com/company/local-community/noise/data/reports>



# Broadwater Lake



## Summary

- An initial screening of the cumulative (Road, Rail, and HS2) noise levels at the Broadwater Lake site demonstrates a large area of the Site falls below the 55 dB  $L_{Aeq,16h}$ .
- Additionally, areas along the eastern boundary achieve levels below 50 dB  $L_{Aeq,16h}$  (suitable for outdoor teaching and communication purposes, as well as any specific hearing-related sensitivities).

# Site – 29 (Queen Mary Reservoir)

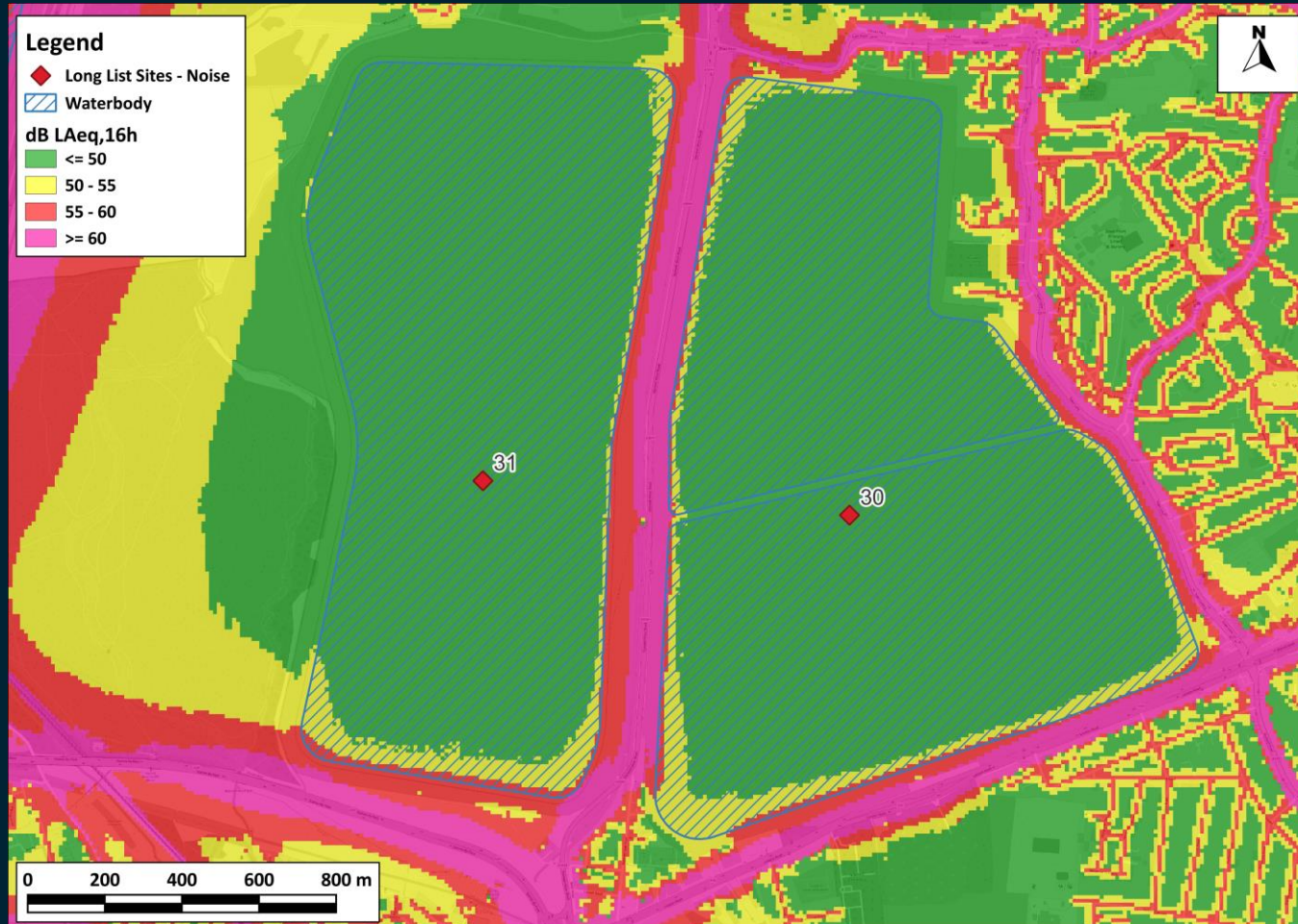


## Summary

- Only a small area of Site 29 exceeds 55 dB  $L_{Aeq,16h}$ ,
- 98% of the area below the screening criterion is also below 50 dB  $L_{Aeq,16h}$ .
  - This Site aligns with the adopted criteria.



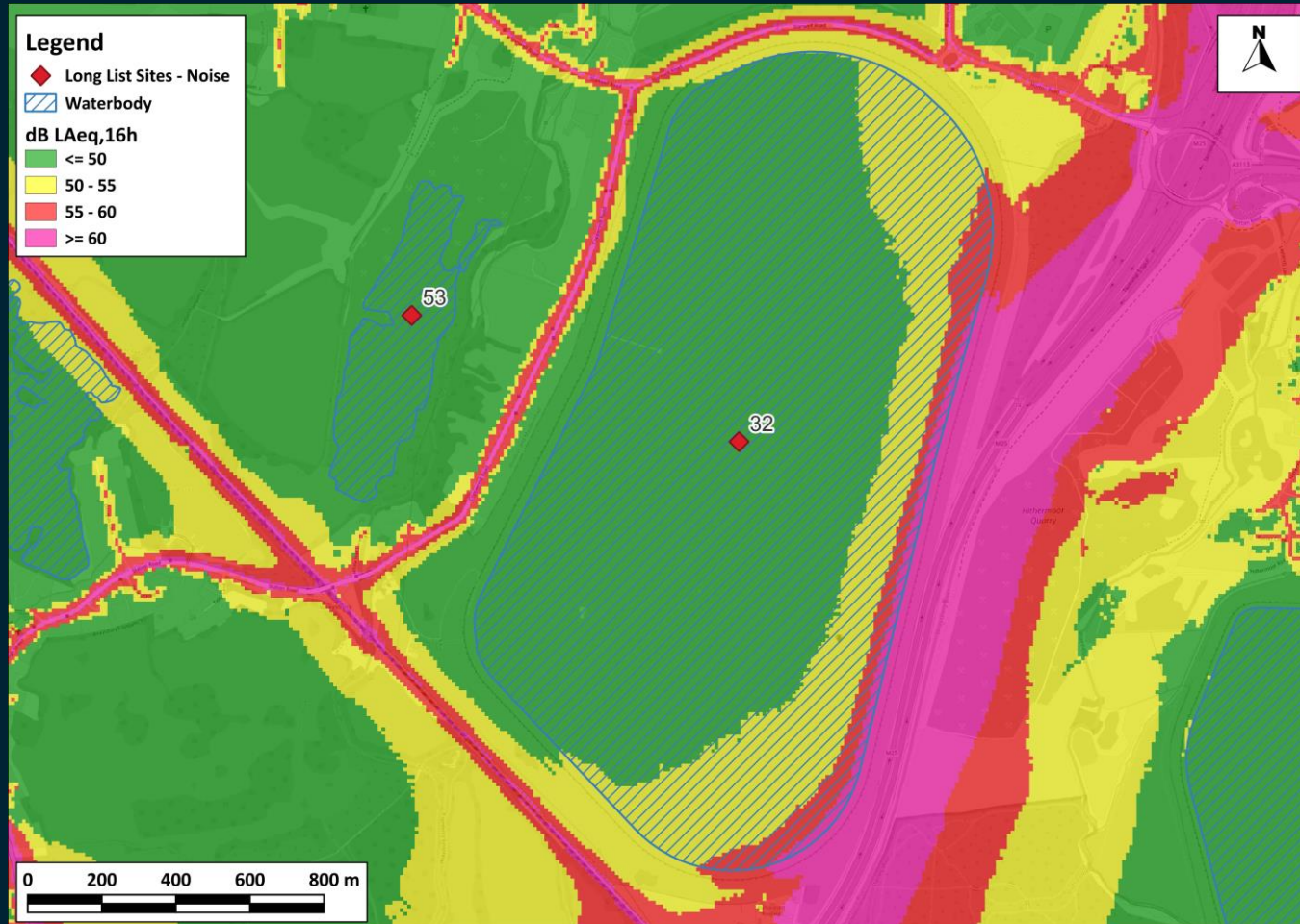
# Site – 30 – 31 (Staines & King George VI Reservoir)



## Summary

- Round 4 Strategic Noise Maps indicate only a small area of Site 30 exceeds 55 dB  $L_{Aeq,16h}$
- 92% of the area below the screening criterion is also below 50 dB  $L_{Aeq,16h}$ 
  - However, following review of Heathrow 2023 noise contours air noise levels reach 60 dB  $L_{Aeq,16h}$
  - This Site does not align with the adopted criteria.**
- Round 4 Strategic Noise Maps indicate only small area of Site 31 exceeds 55 dB  $L_{Aeq,16h}$ , 94% of the area below the screening criterion is also below 50 dB  $L_{Aeq,16h}$ 
  - However, following review of Heathrow 2023 noise contours air noise levels reach 60 dB  $L_{Aeq,16h}$
  - This Site does not align with the adopted criteria.**

# Site – 32 (Wraysbury Reservoir)

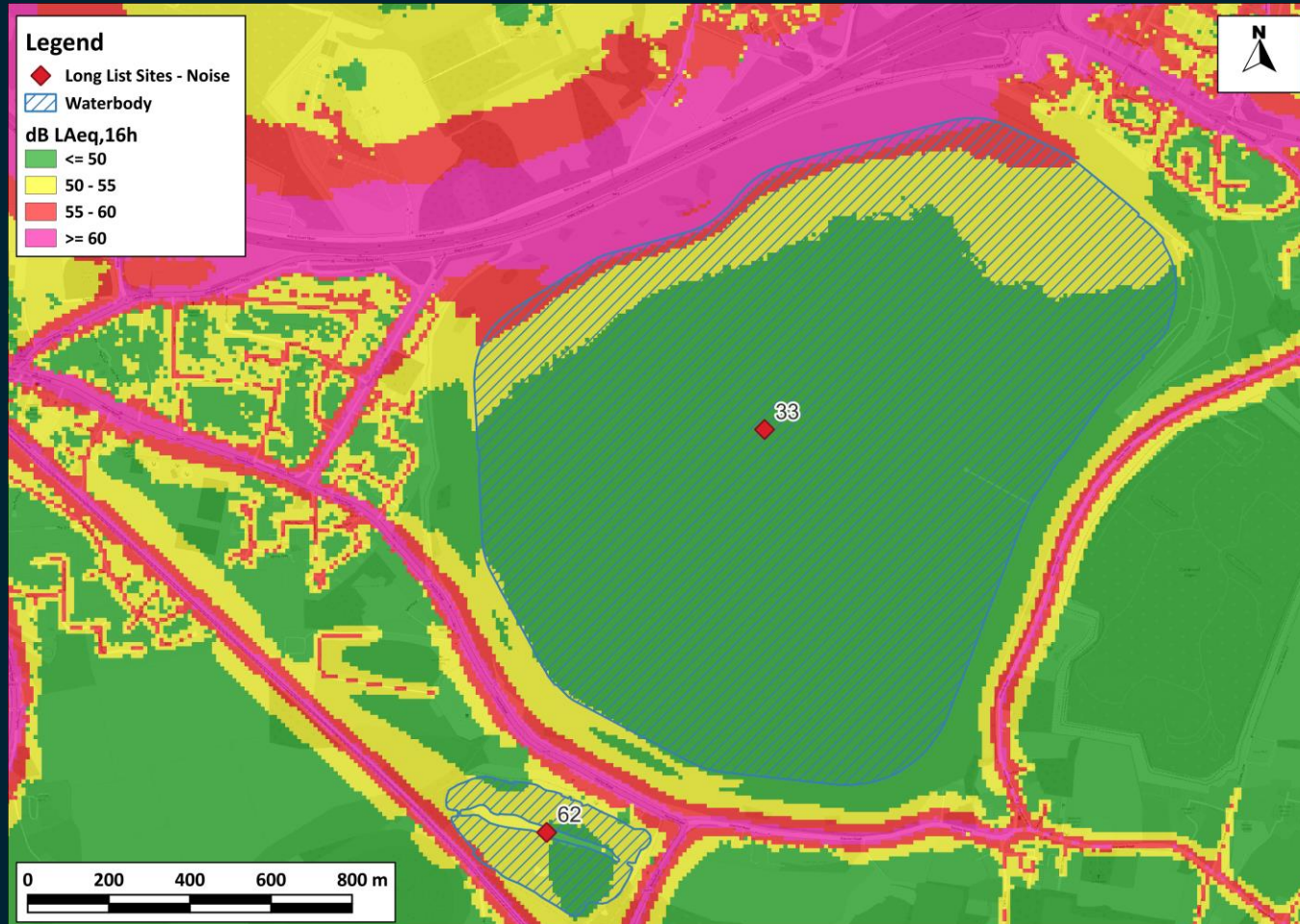


## Summary

- Round 4 Strategic Noise Maps indicate a modest area of Site 32 exceeds 55 dB  $L_{Aeq,16h}$ , 77% of the area below the screening criterion is also below 50 dB  $L_{Aeq,16h}$ .
- However, following review of Heathrow 2023 noise contours air noise levels reach 63 dB  $L_{Aeq,16h}$  based on average modal split contours, 66 dB  $L_{Aeq,16h}$  during westerly operations.
- This Site does not align with the adopted criteria.



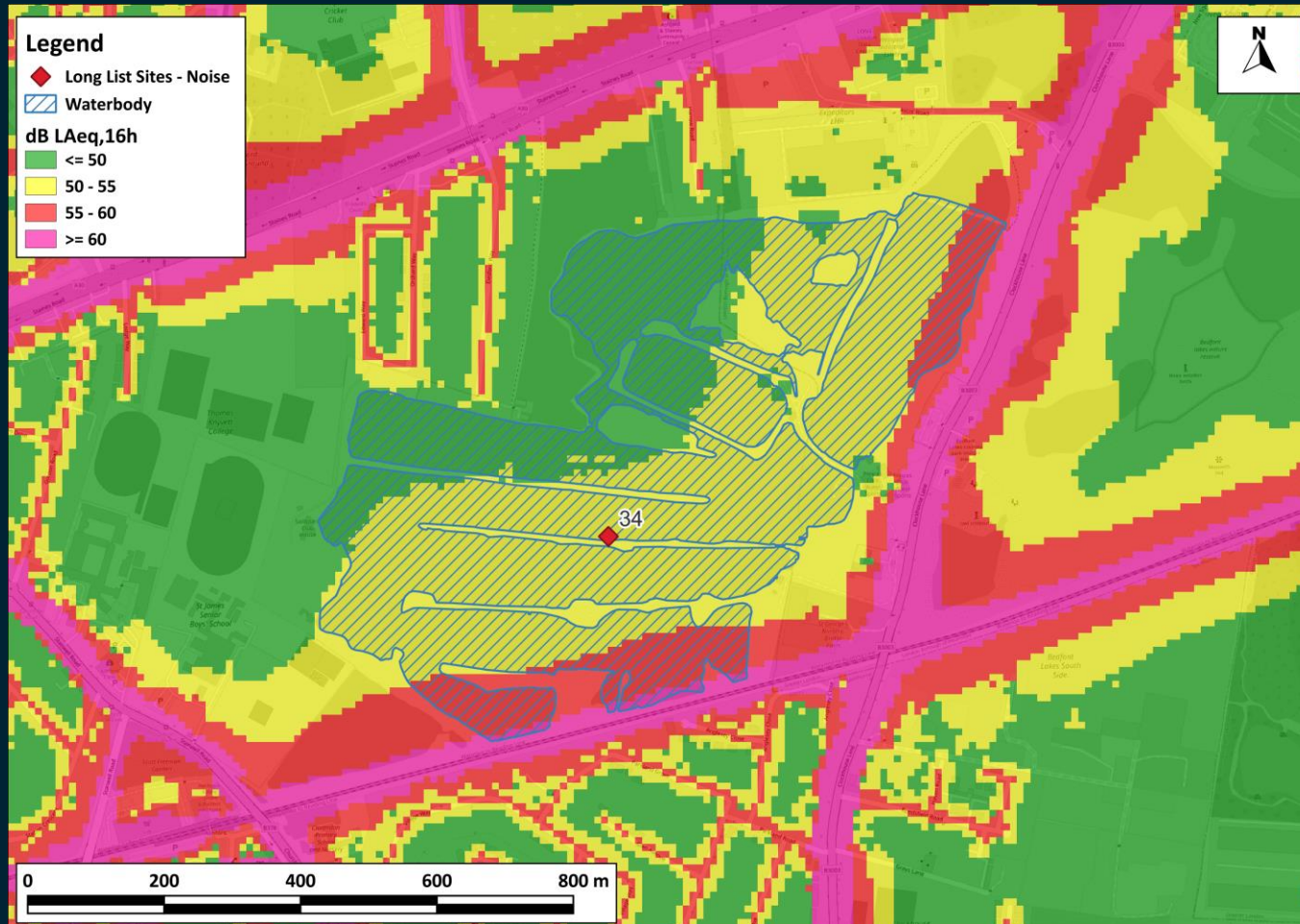
# Site – 33 (The Queen Mother Reservoir)



## Summary

- Round 4 Strategic Noise Maps indicate a modest area of Site 33 exceeds 55 dB  $L_{Aeq,16h}$ , 84% of the area below the screening criterion is also below 50 dB  $L_{Aeq,16h}$ .
- However, following review of Heathrow 2023 noise contours air noise levels reach 60 dB  $L_{Aeq,16h}$  based on average modal split contours, 63 dB  $L_{Aeq,16h}$  during westerly operations.
- This Site does not align with the adopted criteria.

# Site – 34 (???)

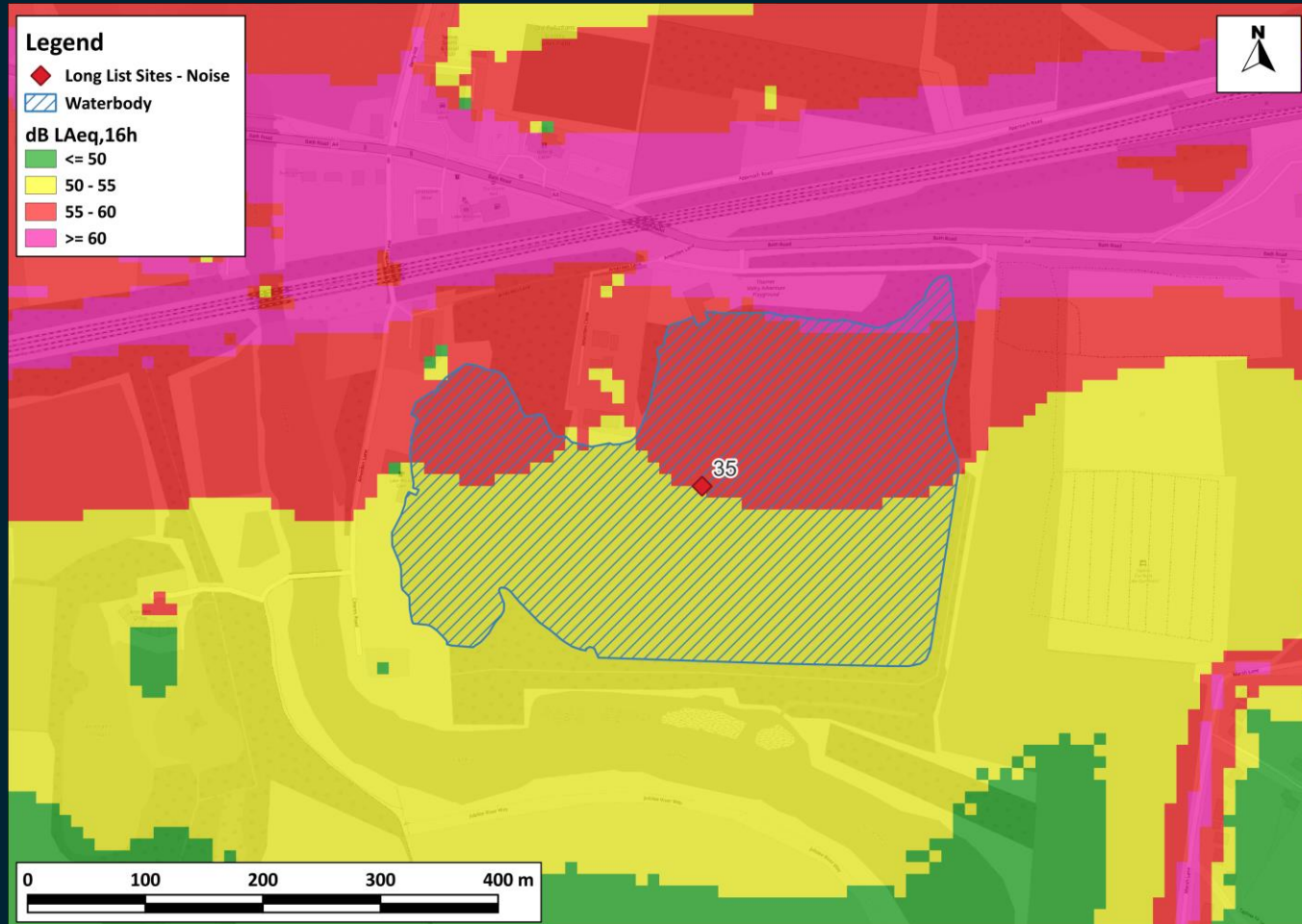


## Summary

- Round 4 Strategic Noise Maps indicate a modest area of Site 34 exceeds 55 dB  $L_{Aeq,16h}$ , 30% of the area below the screening criterion is also below 50 dB  $L_{Aeq,16h}$ .
  - This Site aligns with the adopted criteria.



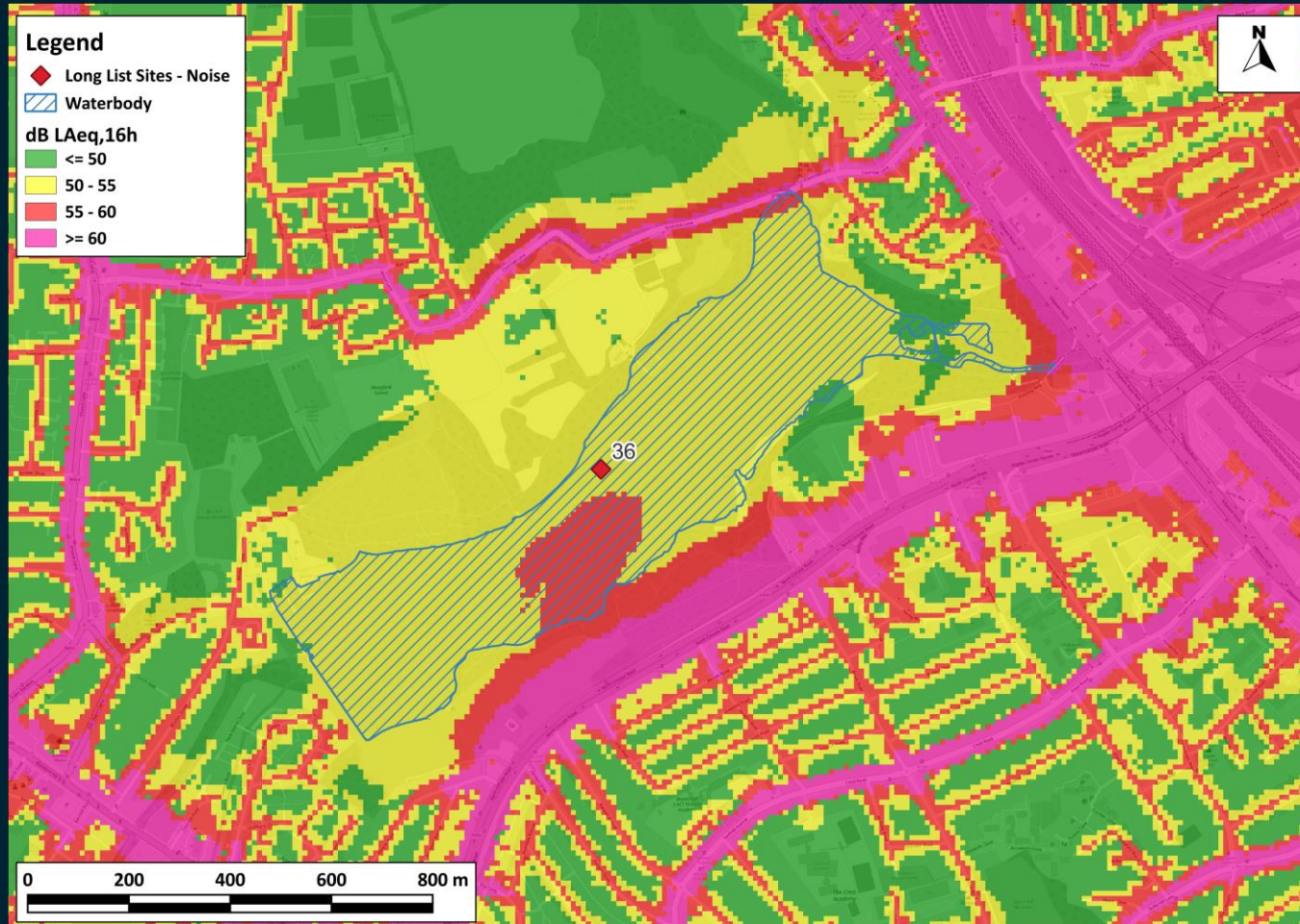
# Site – 35 (Taplow Lake)



## Summary

- Round 4 Strategic Noise Maps indicate there is only 6.7 Ha of Site 35 below 55 dB LAeq,16h and no area below 50 dB LAeq,16h.
- This Site does not align with the adopted criteria.

# Site – 36 (Brent Reservoir)

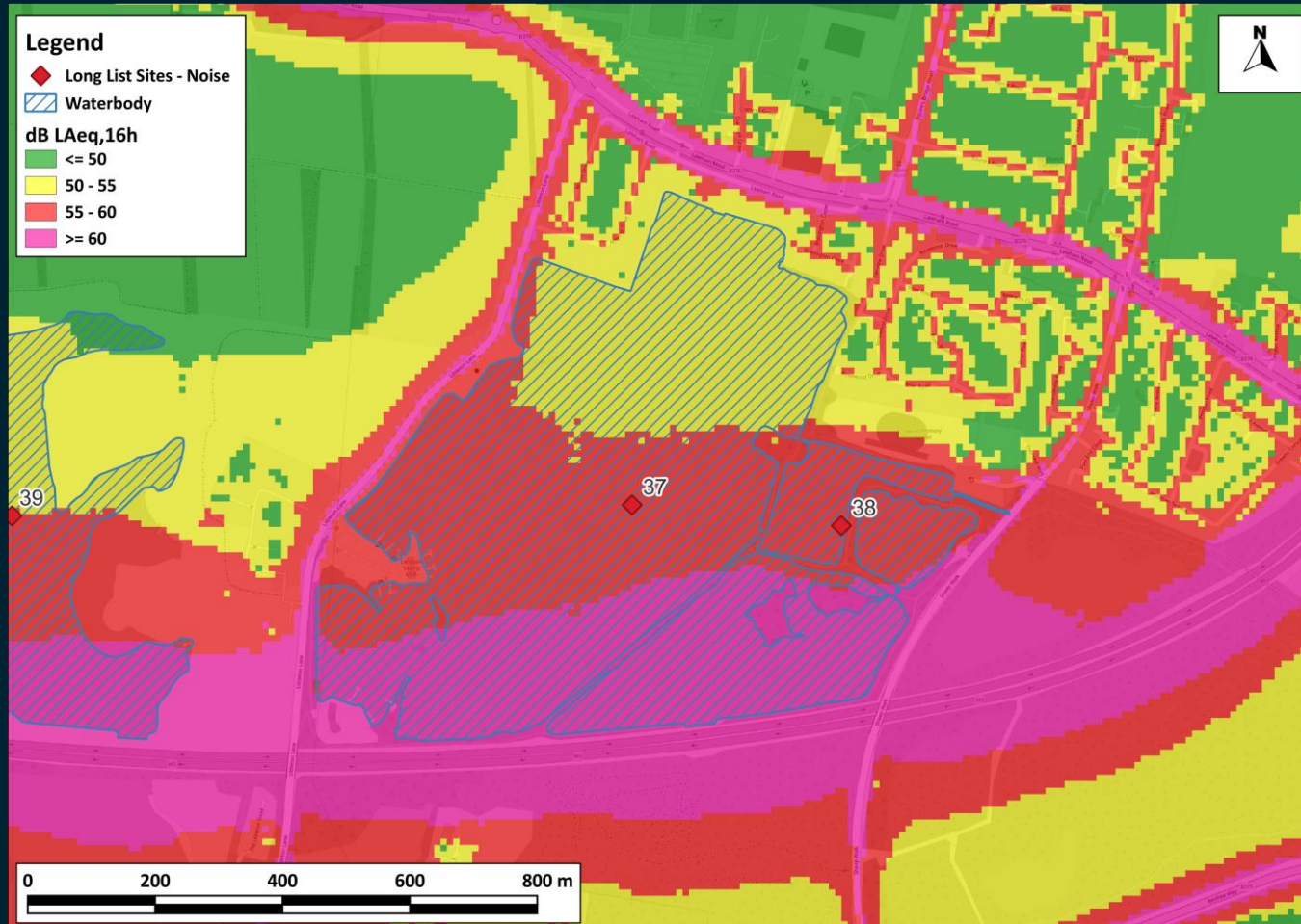


## Summary

- Round 4 Strategic Noise Maps indicate there is a large area of Site 35 below 55 dB  $L_{Aeq,16h}$
- Only 2% of this area is below 50 dB  $L_{Aeq,16h}$ , however there are some pockets on land.
  - This Site is not ideal and is subject to appreciable noise constraints.



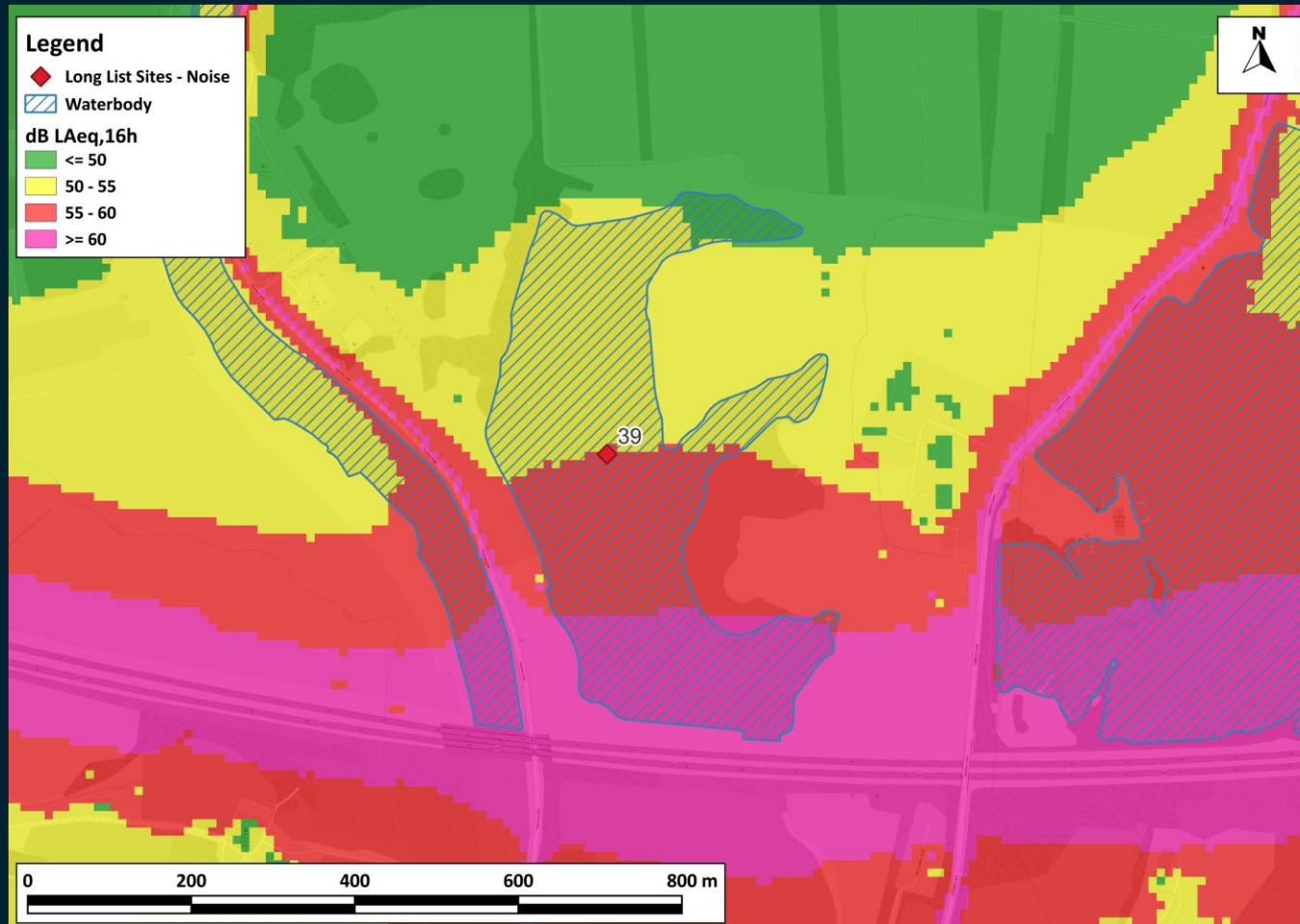
# Site – 37 – 38 (Littleton Lake and The Gravel Pits)



## Summary

- Round 4 Strategic Noise Maps indicate large area of Site 37 exceeds 55 dB  $L_{Aeq,16h}$ , and no area below the lower screening criterion.
  - This Site does not align with the adopted criteria.
- Round 4 Strategic Noise Maps indicate large areas of Site 38 exceeds 55 dB  $L_{Aeq,16h}$ , and no areas below the lower screening criterion.
  - This Site does not align with the adopted criteria.

# Site – 39 (???)

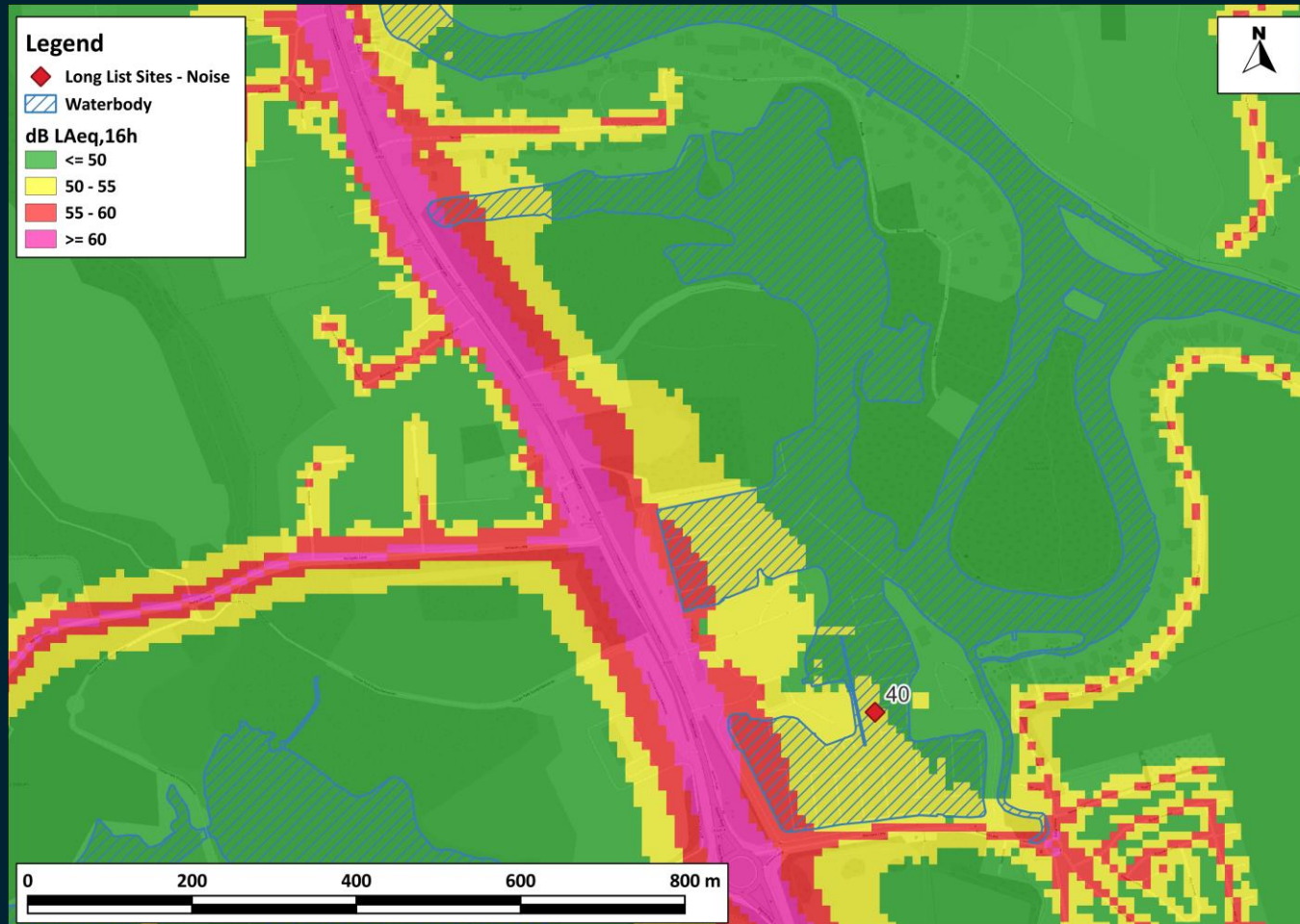


## Summary

- Round 4 Strategic Noise Maps indicate large area of Site 39 exceeds 55 dB  $L_{Aeq,16h}$ , only 9% of the area below the screening criterion is also below 50 dB  $L_{Aeq,16h}$ 
  - This Site is not ideal and is subject to appreciable noise constraints.



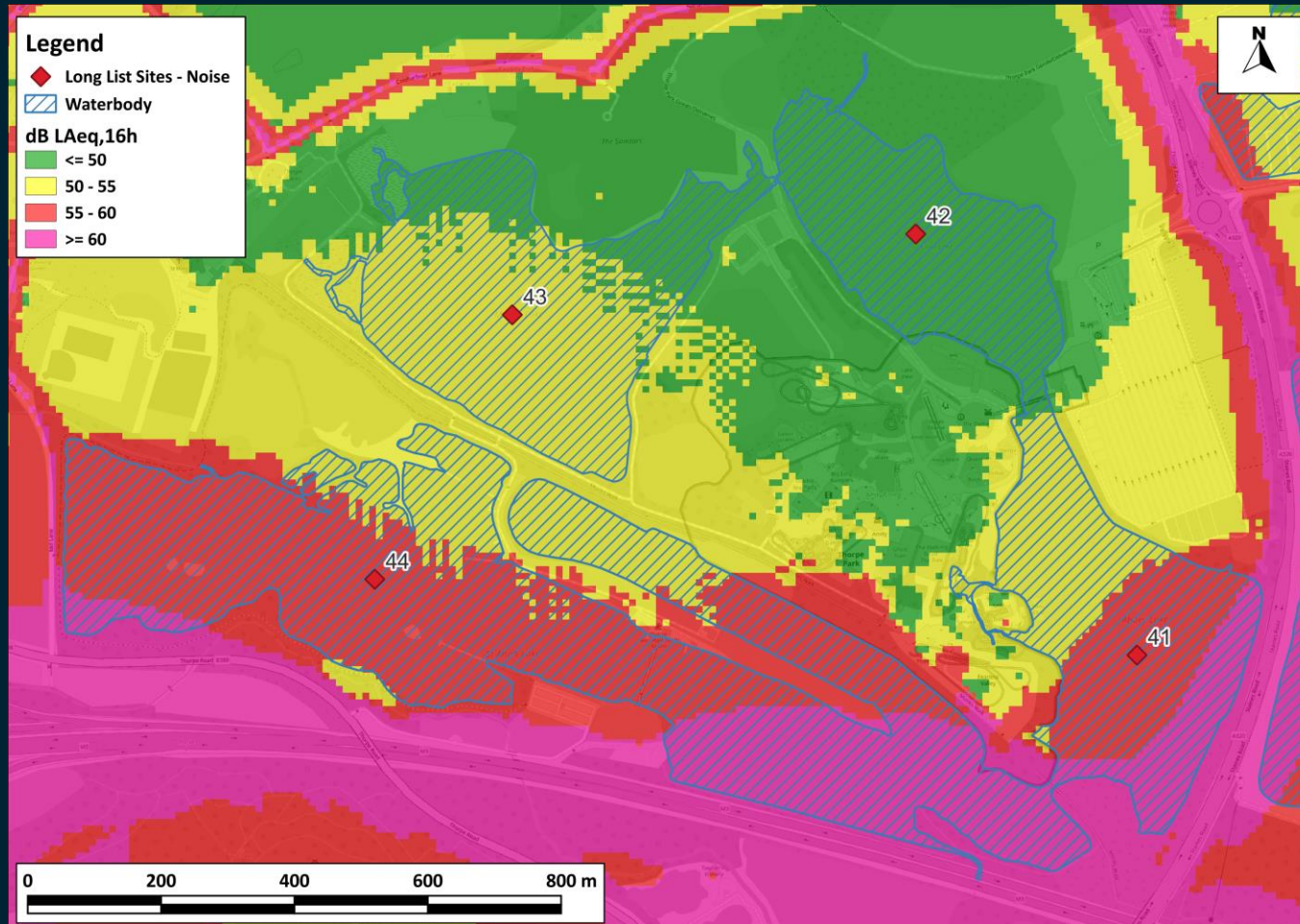
# Site – 40 (Penton Hook Marina)



## Summary

- Round 4 Strategic Noise Maps indicate small areas of Site 40 exceed 55 dB  $L_{Aeq,16h}$ , 75% of the area below the screening criterion is also below 50 dB  $L_{Aeq,16h}$ 
  - This Site aligns with the adopted criteria

# Site – 41 – 44 (Abbey Lake, Fleet Lake, Manor Lake and St Ann's Lake)

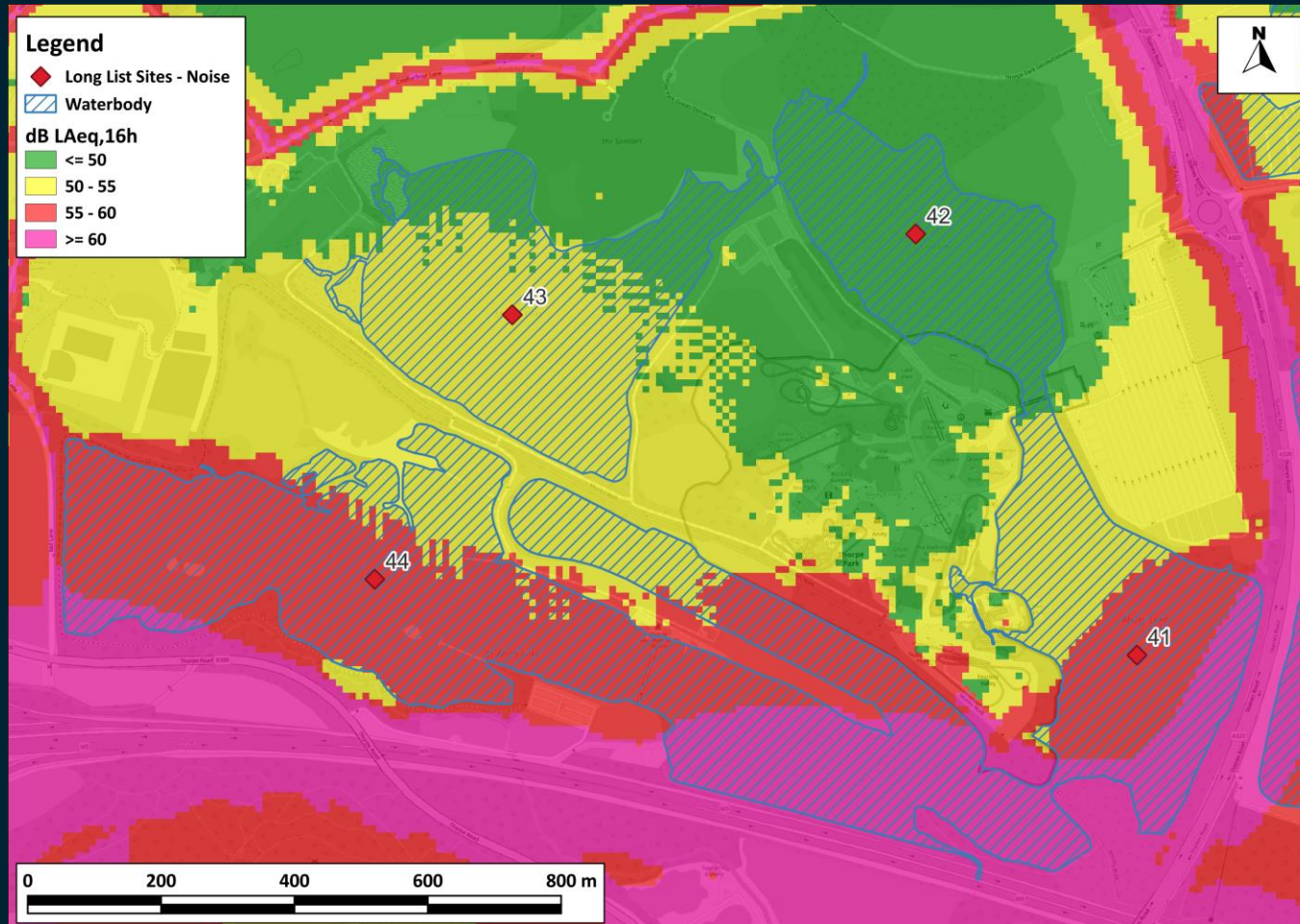


## Summary

- Round 4 Strategic Noise Maps indicate a large area of Site 41 exceeds 55 dB  $L_{Aeq,16h}$ ,
- only 3% of the area below the screening criterion is also below 50 dB  $L_{Aeq,16h}$  however, there are some pockets on land.
  - This Site is not ideal and is subject to appreciable noise constraints.
  - Noise from Thorpe Park may also be a consideration, which is not included in the noise mapping.
- Round 4 Strategic Noise Maps indicate no area of Site 42 exceeds 55 dB  $L_{Aeq,16h}$ , 100% of the area below the screening criterion is also below 50 dB  $L_{Aeq,16h}$ .
  - Following review of Heathrow 2023 noise contours air noise levels reach 54 dB  $L_{Aeq,16h}$ . During westerly operations.
  - This Site aligns with the adopted criteria
  - Noise from Thorpe Park may also be a consideration, which is not included in the noise mapping.



# Site – 41 – 44 (Abbey Lake, Fleet Lake, Manor Lake and St Ann's Lake)

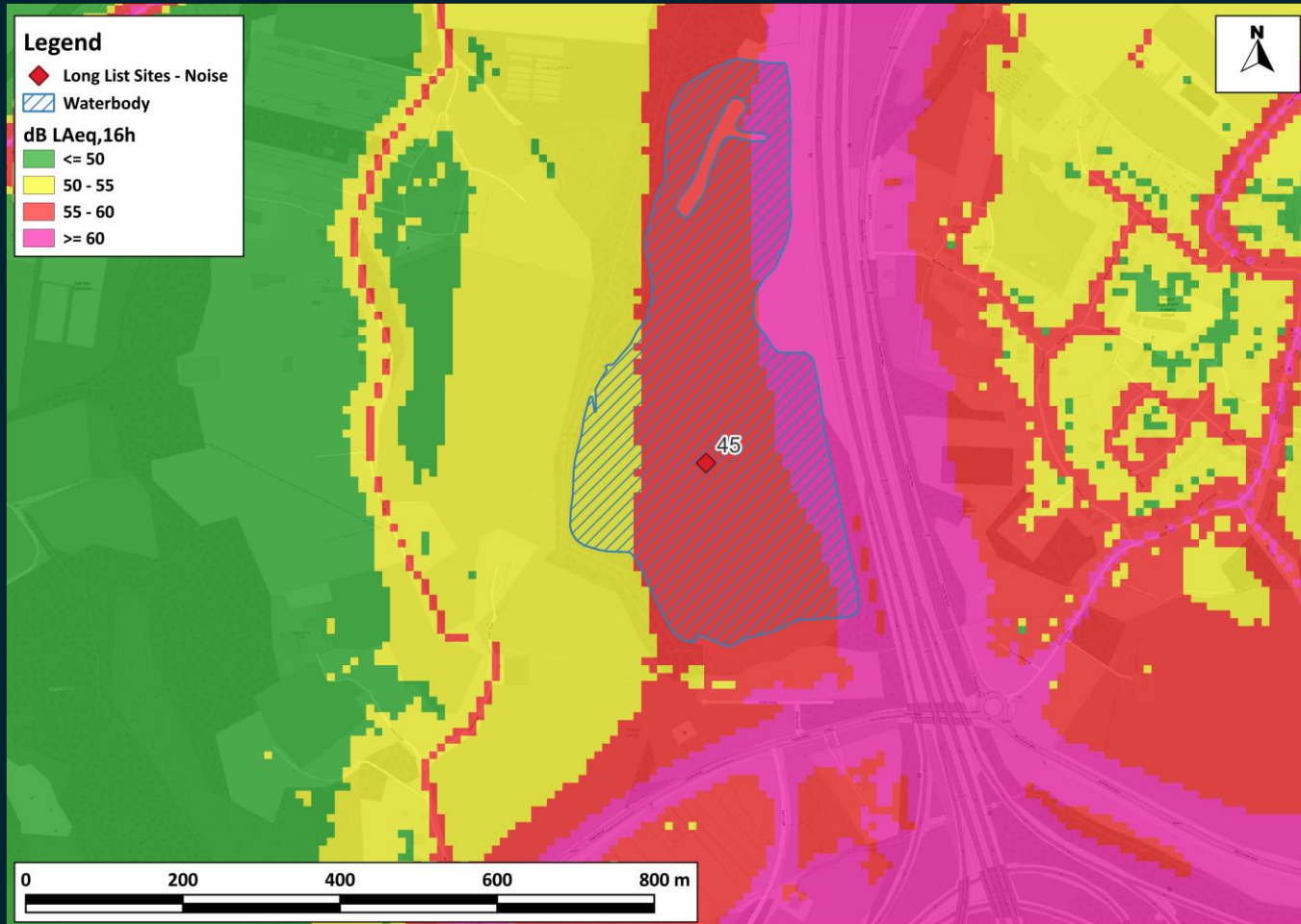


## Summary

- Round 4 Strategic Noise Maps indicate no area of Site 43 exceeds 55 dB  $L_{Aeq,16h}$ , 31% of the area below the screening criterion is also below 50 dB  $L_{Aeq,16h}$ .
  - Following review of Heathrow 2023 noise contours air noise levels reach 54 dB  $L_{Aeq,16h}$ . During westerly operations.
  - This Site aligns with the adopted criteria
  - Noise from Thorpe Park may also be a consideration, which is not included in the noise mapping.
- Round 4 Strategic Noise Maps indicate a large area of Site 44 exceeds 55 dB  $L_{Aeq,16h}$ , there is no area below 50 dB  $L_{Aeq,16h}$ .
  - This Site does not align with the adopted criteria.



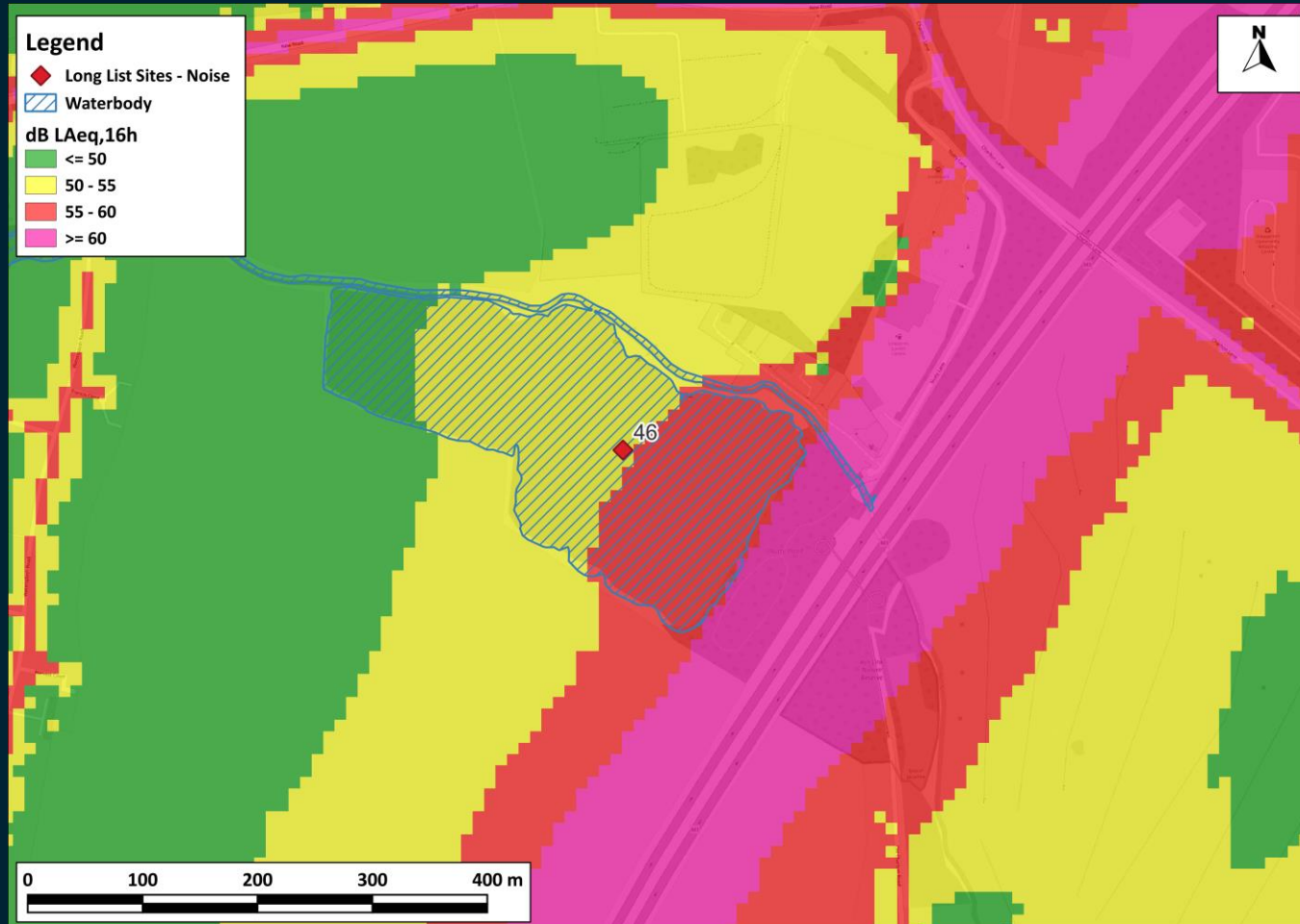
# Site – 45 (Longside Lake)



## Summary

- Round 4 Strategic Noise Maps indicate large area of Site 45 exceeds 55 dB  $L_{Aeq,16h}$ , there are no areas below 50 dB  $L_{Aeq,16h}$ 
  - This Site does not align with the adopted criteria.

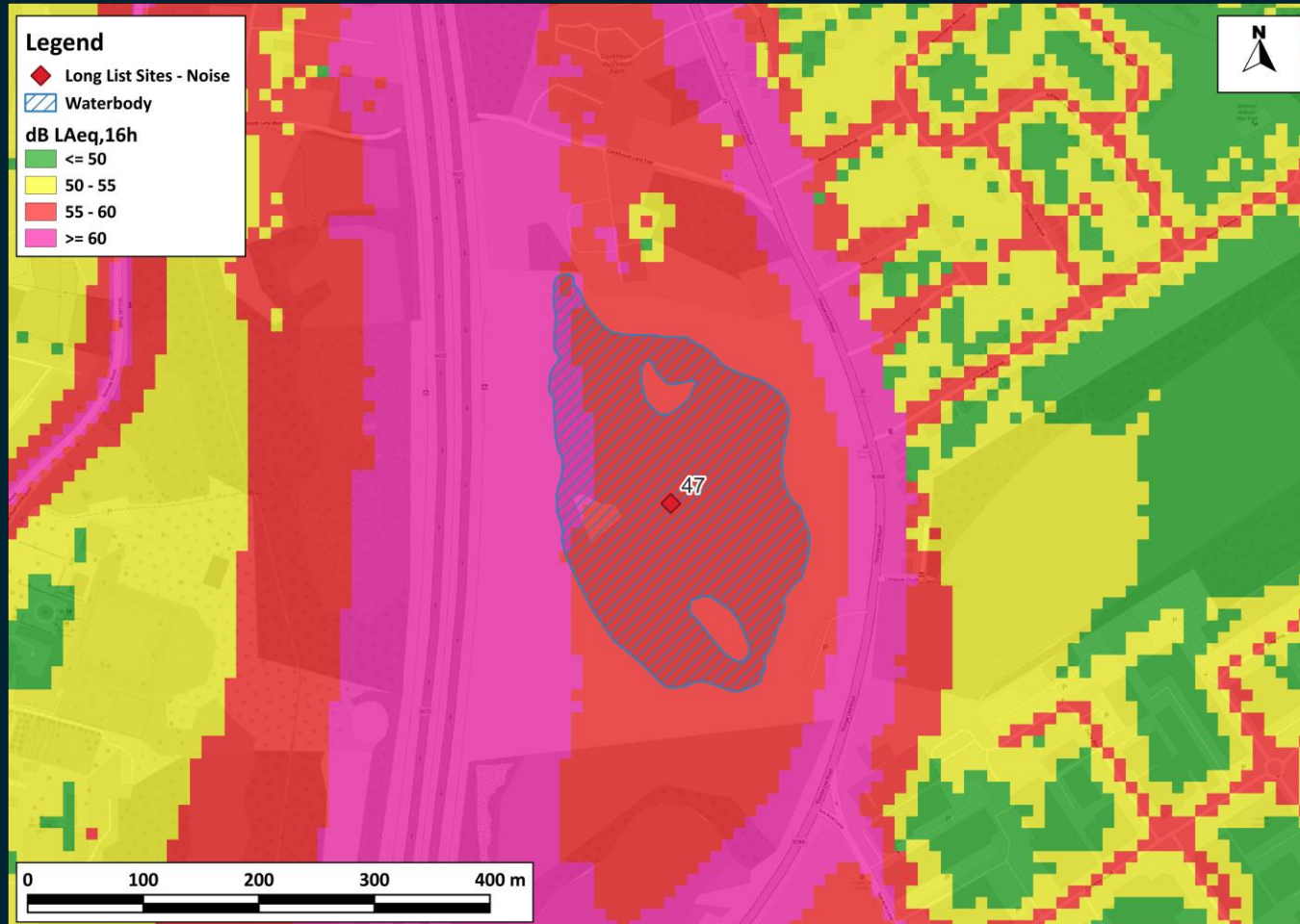
# Site – 46 (River Ash)



## Summary

- Round 4 Strategic Noise Maps indicate there is only 4.8 Ha of Site 46 below 55 dB  $L_{Aeq,16h}$ , 32% of the area below the screening criterion is also below 50 dB  $L_{Aeq,16h}$  however there are some pockets on land to the west.
  - This Site is not ideal and is subject to appreciable noise constraints.

# Site – 47 (Thorpe Lea Fishery)

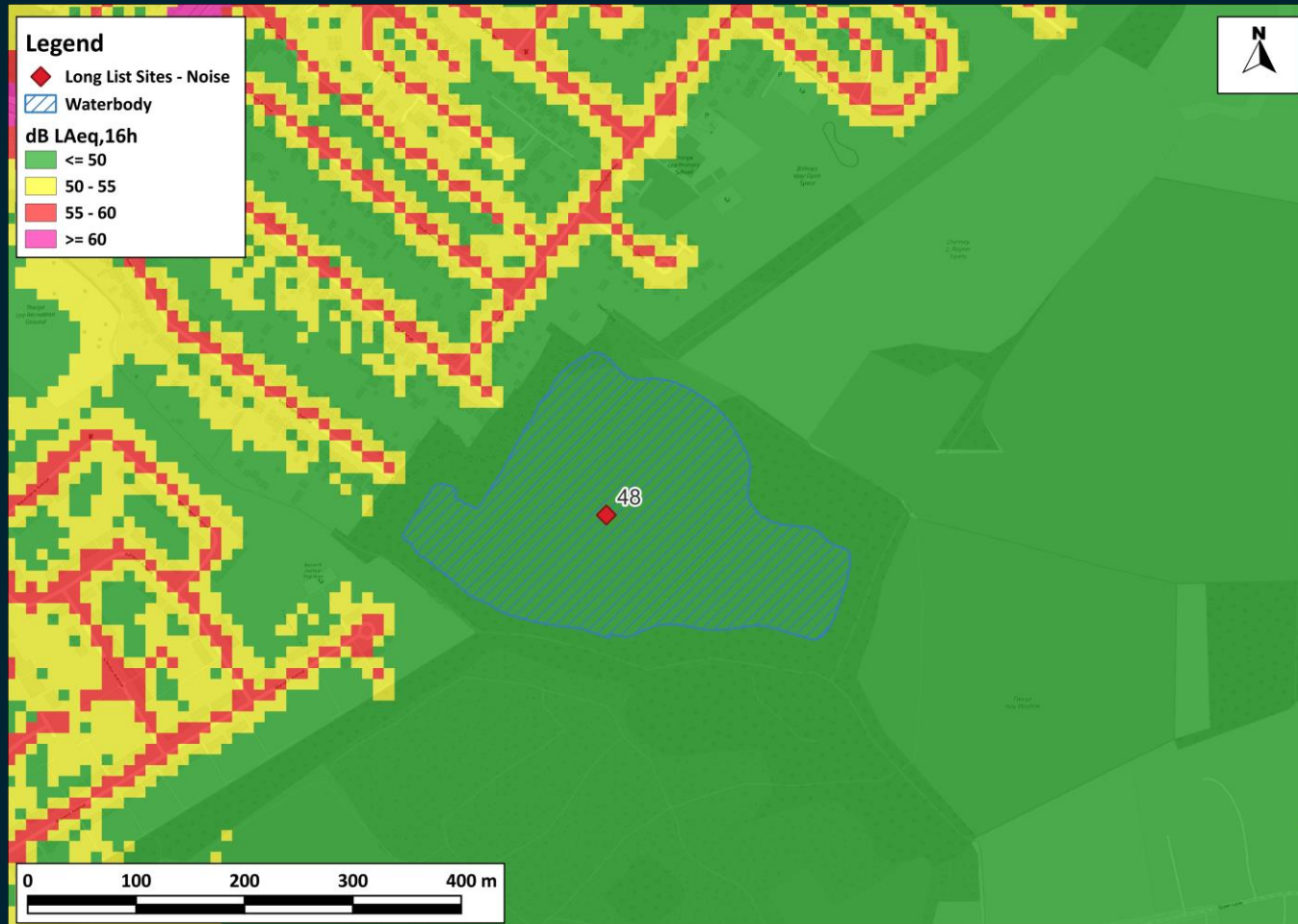


## Summary

- Round 4 Strategic Noise Maps indicate the entirety of Site 47 exceeds 55 dB  $L_{Aeq,16h}$ .
- This Site does not align with the adopted criteria.



# Site – 48 (Mead Lake)

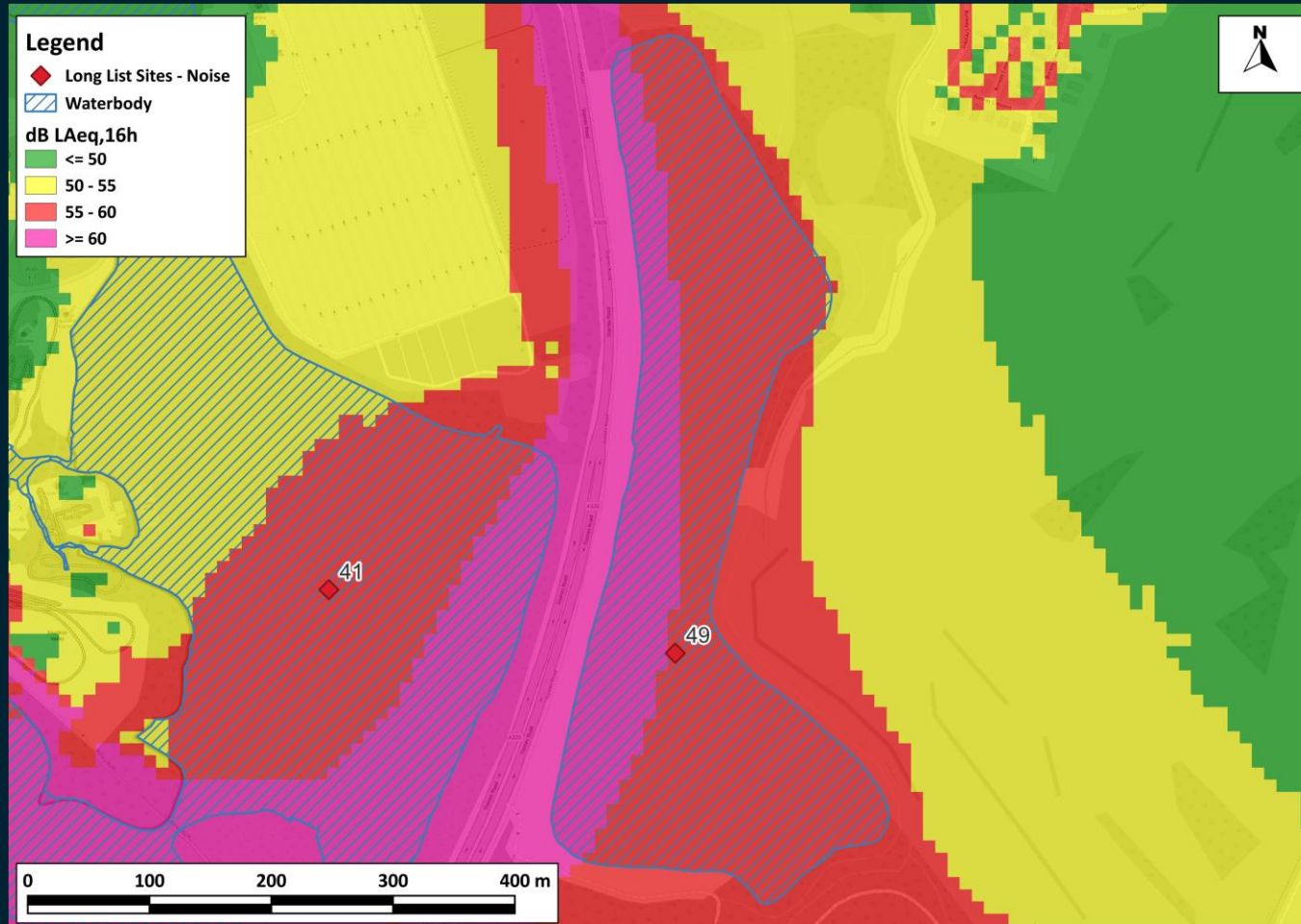


## Summary

- Round 4 Strategic Noise Maps indicate the entirety of Site 48 also below 50 dB  $L_{Aeq,16h}$ .
  - However, following review of Heathrow 2023 noise contours air noise levels reach 54 dB  $L_{Aeq,16h}$  based on average modal split contours, 54 dB  $L_{Aeq,16h}$  during westerly operations.
  - Site 48 is also only 6.4 Ha.
  - This Site does not align with the adopted criteria.



# Site – 49 (???)



## Summary

- Round 4 Strategic Noise Maps indicate the entirety of Site 49 exceeds 55 dB  $L_{Aeq,16h}$ .
  - This Site does not align with the adopted criteria.