From: Sue Dowling

Sent: 03 February 2025 09:51
To: Mckenna Lorna: H&F <Lorna.Mckenna@lbhf.gov.uk>
Cc: Anisha Ali
Subject: FW: FINAL Hyperlinks for Applicant's Bundle (KIN533/1)

Dear Lorna

Capital Theatre - Final Preparations for Hearing on Wednesday
Hyperlinked Versions of Existing Documentation

I hope your weekend was good.

As mentioned last week, some of the hyperlinks in the Applicant's bundle had been lost once the papers were saved as a PDF and uploaded as a Supplemental Agenda.

I therefor now attach a Word version with all three hyperlinks inserted. The information in the hyperlinks is not new (as in it was circulated last week) but the attached links just make it easier to read, and this might be helpful to the objectors and to the Committee members. It would be helpful if the attachment in this format i.e. in Word rather than PDF) could therefore be forwarded to both, so that all can easily click into the hyperlinks if they wish to do so. We may also wish to connect to these links at the Hearing on Wednesday (although we appreciate that the timings for our presentation may not permit this).

We are anticipating one more document ahead of the Hearing, relating to Noise management – so I will get this to you as soon as possible, certainly later today.

With continued thanks for your assistance,

Best regards

Sue

Capital Theatre – Hyperlinks for Applicant's Bundle

Hyperlinks to Documents listed in Supplemental Agenda:

1. Introductory Trailer to Dirty Dancing at Capital Theatre – London - Dirty Dancing
2. Capital Theatre – Presentation (pages 16 – 27) – double click on icon below for link:

3. Transport Information – Additional Supporting Information – Capital Theatre - Dirty Dancing & Access Westfield London

From: Sue Dowling
Sent: 03 February 2025 14:08
To: Mckenna Lorna: H&F <Lorna.Mckenna@lbhf.gov.uk>
Cc: Anisha Ali
Subject: Final document! (KIN533/1)

Dear Lorna

Capital Theatre

Further to my email this morning, here is the Noise Management Statement ready for the Hearing on Thursday. We would be grateful if you would arrange for this to be added to the Agenda papers, for the Committee's and the objectors' consideration.

With thanks,

Sue

Sue Dowling

Noise Management Statement
Capital Theatre

1.0 Introduction

Capital Theatre is being built within the middle floor of the former Debenhams in Westfield White City. The existing structure was not originally designed for theatrical use, presenting acoustic challenges due to its shared steel frame, lightweight construction, and adjacent tenants, **TK Maxx** and **TOCA**.

The theatre's location is also influenced by an adjacent A-road, which provides a high level of ambient background noise, reducing the perceptibility of sound escaping from the venue. The acoustic strategy has been carefully developed to contain operational noise within the theatre, (a requirement of the lease with Westfield), minimise disruption to neighbouring tenants, and ensure compliance with industry standards.

2.0 Acoustic Strategy

The project complies with key British and international acoustic standards, including **BS8233:2014**, **BS4142:2014**, and **BREEAM UK New Construction 2014**, ensuring appropriate noise insulation, vibration control, and compliance with best practices for entertainment venues.

To mitigate external noise and control internal reverberation, the following measures are being implemented:

- **High-performance internal partitions and floors**: Designed to prevent airborne and impact noise transmission.
- **Sound lobbies**: Installed at all key entry points to prevent noise leakage.
- **Acoustic ceilings and absorbers**: Applied in critical spaces to control reverberation and optimise sound clarity.

These measures will significantly reduce noise spillover to the shopping mall and adjacent tenants, ensuring a controlled sound environment.

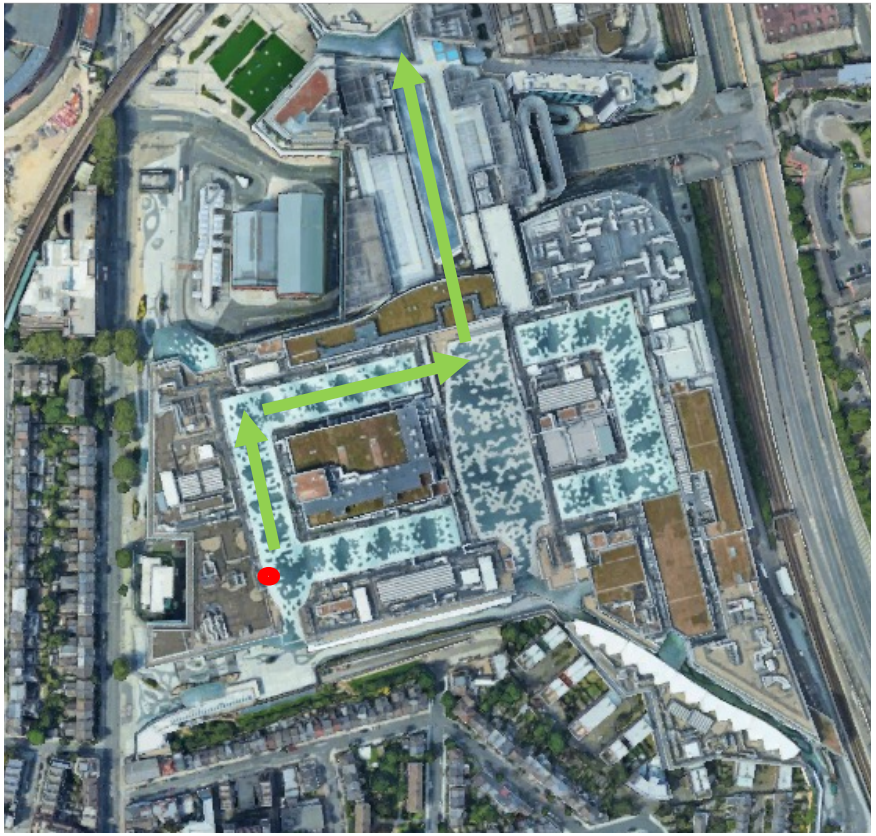
3.0 Environmental Noise Considerations

The A-road adjacent to the theatre acts as a natural noise buffer, meaning that any sound escaping from the venue, including from the exiting audience, is likely to be masked by existing traffic noise. The theatre's external noise impact is expected to be minimal.

4.0 Crowd and Event Noise Management

To prevent excessive noise from audience dispersal and public areas:

- **Controlled exit routes**: Audience dispersal will be managed via designated shopping mall routes and pedestrian areas. Detailed overleaf
- **Pre-show foyer noise control**: Acoustic absorption measures in the foyer will prevent noise build-up and spillover.
- **Acoustic design of bar areas**: Sound-diffusing materials will be used to reduce reverberation.
- **Staff and operational management**: Venue staff will oversee dispersal to **ensure an orderly and quiet exit**.



5.0 Auditorium and Performance Noise Control

The auditorium has been acoustically modelled to ensure optimum sound quality while containing noise within the venue. Key design features include:

- **Raked seating construction**: Preventing sound transmission to lower floors.
- **Enhanced ceiling insulation**: Capable of achieving **66 dB Rw + ctr** where fully sealed.
- **Acoustic absorber panels**: Reducing reverberation and improving clarity of sound.
- **Column encasements and sealed partitions**: Preventing structural sound transmission.

While complete elimination of low-frequency sound transfer is challenging, the proposed measures significantly reduce noise to adjacent tenanted spaces.

6.0 Noise from Building Services

To minimise noise from mechanical and electrical services, the following measures will be implemented:

- **Cross-talk attenuation** on all ductwork branches serving critical spaces.
- **Fully vibration-isolated external plant and air conditioning units.**
- **Low-velocity grilles, diffusers, and silencers** to reduce mechanical noise.
- **Spring hangers for services installations** to prevent vibration transmission.
- **All penetrations between spaces will be acoustically sealed** to prevent sound leakage.

All MEP (Mechanical, Electrical, and Plumbing) installations will be integrated with theatrical and audio-visual systems to maintain a high-quality acoustic environment.

7.0 Audio and Voice Alarm Acoustic Interface

The audio system will be carefully integrated with the theatre's acoustic design to maintain high-quality sound while minimising external disturbance. Measures include:

- **Resilient suspension for all speaker installations** to prevent structural transmission.
- **Sound limiter installation** to prevent excessive noise levels.
- **Electromagnetic shielding** to avoid interference with other electrical systems.
- **Integration with fire and security systems** to ensure automatic override in an emergency.

8.0 Auditorium Acoustic Beam Cladding

To further enhance acoustic containment, all structural beams within the auditorium will be acoustically clad where they pass through internal walls, minimising structural noise transmission. The cladding system will include:

- **A dual-layer independent framing system.**
- **Minimum 100mm air gap between cladding layers, with mineral wool insulation (density: 33kg/m³).**
- **Multiple layers of acoustic board with staggered joints.**

This approach optimises the sound insulation performance of structural elements.

9.0 Fire Safety and Acoustic Compliance

All acoustic lining materials will comply with **Building Regulations Part B (Fire Safety)** and **BS 476: Part 7: 1997** for flame spread. Requirements include:

- **Class 1 fire-rated linings in all escape routes.**
- **Surface spread of flame ratings compliant with BS EN 13501-1.**
- **Certification of all acoustic absorbers for fire safety approval.**

10.0 Conclusion

The Capital Theatre's acoustic design has been developed to contain performance noise, manage crowd dispersal, and control mechanical noise, ensuring minimal disturbance to neighbouring tenants, the shopping mall, and external areas.

Key mitigating factors include:

- **The A-road acting as a natural noise buffer.**
- **Excellent transport links (Tube / Bus / Taxis)** between the venue and the A road.
- **Comprehensive internal acoustic measures** ensuring sound containment.
- **Proactive audience management** to prevent dispersal noise.

These strategies ensure compliance with best practices while allowing the theatre to operate effectively without significant external noise impact.