

2<sup>nd</sup> March 2020

The Theatre of Comedy Company  
Shaftesbury Theatre  
210 Shaftesbury Avenue  
London  
WC2H 8DP

FAO Richard Anelay

Dear Richard,

**SHAFTESBURY THEATRE, LONDON**  
**CROSSRAIL OPERATIONAL NOISE STATEMENT**

Gillieron Scott Acoustic Design (GSAD) have been commissioned by The Theatre of Comedy Company to undertake the acoustic design of the refurbishment and new construction works at Shaftesbury Theatre located at 210 Shaftesbury Avenue, London WC2H 8DP. Project works have been ongoing and are currently in RIBA construction Stage 5. Part of the new construction work taking place at Shaftesbury Theatre involves an extension at basement level to form a new Bar. The nearest point of the new basement extension is approximately 6m from the nearest edge of the Eastbound tunnel wall when measured in plan view.

Underground railways currently in operation adjacent to the site include the Central and Piccadilly lines and similar to many theatres in the west end, structure-borne noise associated with the operation of existing London Underground lines is audible within the auditorium and its supporting spaces.

The new Crossrail Eastbound line passes the auditorium at an approximate distance of 13m when measured in plan view from the nearest edge of the new tunnel wall to the theatre's building envelope. The new Crossrail Westbound line is positioned at a significant distance from the theatre and as such any noise associated with the operation of this line is likely to be inaudible against prevailing background sound levels occurring within the theatre and its supporting spaces.

GSAD have liaised with members of the Crossrail team or members employed by the Crossrail team including Geoff Rankin, 3rd Party Developments Manager, Chief Engineer's Group, Crossrail Limited and Russell Gee, Senior Engineer, Rail Engineering, Arup.

Information kindly received from Russell Gee via Geoff Rankin confirmed a section of "Sabeta HAS" isolated track bed system has been installed on the Eastbound line directly adjacent to Shaftesbury Theatre from Chainage 5300 onwards.

GSAD assume the specialist track bed system has been installed to ensure operational noise from the incoming Crossrail line meets appropriate design targets for structure-borne re-radiated noise in adjacent noise sensitive spaces such as residential accommodation or the auditorium at Shaftesbury Theatre.

GSAD expect that it is likely that noise associated with the operation of the existing Central and Piccadilly lines will continue to be louder within the auditorium than noise associated with the operation of the incoming Eastbound Crossrail line. However, it is noted that noise associated with the operation of Crossrail may be slightly louder within the new Bar than the main auditorium due to its location being closer to Crossrail lines. GSAD do not believe this will be an issue as the basement box operation will be less critical than the main auditorium.

Yours sincerely,



Tim Scott  
Director