

**From:** Keith Forshaw  
**To:** Alison Acton  
**Sent:** 16<sup>th</sup> August 2023, 11.05

Hi Alison,

Not sure why this hasn't hit your mailbox, please see below.

I'll also attach this to your earlier mail to see if that gets through.

Speak soon,

Regards,

**Keith Forshaw**  
**Property Manager**

Mobile: +44 7770704467

E-Mail: [keith.forshaw@livenation.co.uk](mailto:keith.forshaw@livenation.co.uk)

Address: O2 Apollo Theatre | Stockport Road | Ardwick Green | Manchester | M12 6AP |  
United Kingdom

**From:** Keith Forshaw  
**Sent:** Wednesday, August 16, 2023 8:10 AM  
**To:** [Alison.Acton@trafford.gov.uk](mailto:Alison.Acton@trafford.gov.uk)  
**Subject:** FW: VWH

Morning Alison,

Sorry this is slightly later than promised – I had some PC update issues!

As promised, further to our discussions earlier today, please see the email below from Richard Stone who is a chartered structural engineer with Booth King.

As you can see, Richard is happy for us to continue to use the balcony; however, we will restrict the capacity to 25 people in the short term until Booth King have completed a full analysis of the balcony over the next few weeks. The reduced balcony capacity will continue until the full analysis is complete; therefore, we will continue to trade as discussed previously.

Happy to discuss anything further with you from the tenants perspective and would be grateful if you could keep me copied on your discussions with Adam Geoffrey.

Speak soon,

Regards,

**Keith Forshaw**  
**Property Manager**

Mobile: +44 7770704467

E-Mail: [keith.forshaw@livenation.co.uk](mailto:keith.forshaw@livenation.co.uk)

Address: O2 Apollo Theatre | Stockport Road | Ardwick Green | Manchester | M12 6AP |  
United Kingdom

**From:** Keith Forshaw

**Sent:** Wednesday, August 16, 2023 8:01 AM

**To:** 'Richard Stone' <[Richard.S@booth-king.co.uk](mailto:Richard.S@booth-king.co.uk)>

**Cc:** Andrea Manenti <[Andrea.M@booth-king.co.uk](mailto:Andrea.M@booth-king.co.uk)> [Dhanish.M@booth-king.co.uk](mailto:Dhanish.M@booth-king.co.uk)

**Subject:** RE: VWH

Excellent, thanks Richard.

Sorry I didn't reply last night as my PC got stuck updating!

Can you draft a proposal for the further assessment work with a timescale please?

Thanks again for helping at short notice.

Speak soon,

Regards,

**Keith Forshaw**  
**Property Manager**

Mobile: +44 7770704467

E-Mail: [keith.forshaw@livenation.co.uk](mailto:keith.forshaw@livenation.co.uk)

Address: O2 Apollo Theatre | Stockport Road | Ardwick Green | Manchester | M12 6AP |  
United Kingdom

**From:** Richard Stone <[Richard.S@booth-king.co.uk](mailto:Richard.S@booth-king.co.uk)>

**Sent:** Tuesday, August 15, 2023 9:08 PM

**To:** Keith Forshaw <[Keith.Forshaw@livenation.co.uk](mailto:Keith.Forshaw@livenation.co.uk)>

**Cc:** Andrea Manenti <[Andrea.M@booth-king.co.uk](mailto:Andrea.M@booth-king.co.uk)> Dhanish Musafar <[Dhanish.M@booth-king.co.uk](mailto:Dhanish.M@booth-king.co.uk)>

**Subject:** RE: VWH

Hi Keith,

Further to our site visit this morning we have run a frame design check on the balcony steelwork. As discussed, this is to satisfy two principal questions in the immediate short term to satisfy all that the balcony can continue in use:

1. Are the calculations provided by Harry Seymour & Associates in accordance with the as-built situation;
2. Are the ties fixing the columns back to the existing structure within design capacity.

We have run a 2D frame model to resolve these queries and provide you with comfort that the structural design is adequate for the demands of use. The model was simplified by ignoring the masonry ties back into the masonry piers, and only including the pair of ties at the head of the column – this is a conservative assumption.

1. Following our site inspection, the as built situation closely follows the drawing, with some minor differences in the cleat fixing back to masonry (these make no difference to the design results). The design model shows that the loads and resultant forces /moments are as determined by Harry Seymour & Associates. These are all within design limits of the steel. The deflection on the tip of the cantilever is within serviceability parameters.
  - a. We note that the applied design load of  $5\text{kN/m}^2$  is approximately double the maximum capacity of people on the balcony, which should provide some further comfort.
2. The resultant force at the head of the column is a 45kN (ULS) tie force – a visual confirmation on site shows that there are at least 8 M12 fixings on each frame fixed back into the existing concrete encased steel structure. This equates to 5.6kN per bolt, which is within the capacity of an M12 bolt fixed to concrete.

We will send you a brief report showing the results tomorrow, as evidence of the above.

Further to this design analysis, we undertook our inspection today and saw no signs of distress on the structure; including the bolts, brickwork and concrete. We are therefore of the view that the structure is within design and serviceability limits, and can continue in use.

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Whilst the frame analysis raises no alarms, we would suggest some further analysis is undertaken to demonstrate a footfall analysis on the full balcony structure to check if there are any vibration issues. The fact there is no sign of distress, nor complaints of 'bounce' in the balcony over the years of use suggests this is a conservative check, but it would close out any concerns. Turnaround on this won't be as quick, as the analysis is quite involved, so we can discuss this over the next couple of days to confirm our scope as things develop.

I'm in and out of meetings tomorrow, but will talk any of this through as you need. If there are any further updates / comments from the council please keep us updated.

*Kind regards,*

**Richard Stone MEng CEng MStructE**  
Associate

T: 0161 694 7087  
M: 07921 378673

**Offices in: Ramsbottom, Manchester & Edinburgh**  
[www.booth-king.co.uk](http://www.booth-king.co.uk)

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS E-MAIL

**From:** Keith Forshaw <[Keith.Forshaw@livenation.co.uk](mailto:Keith.Forshaw@livenation.co.uk)>  
**Sent:** Tuesday, August 15, 2023 10:29 AM  
**To:** Richard Stone <[Richard.S@booth-king.co.uk](mailto:Richard.S@booth-king.co.uk)>  
**Subject:** VWH

Hi Richard,

These are the details the landlord has previously provided to the council.

Speak later,

Regards,

**Keith Forshaw**  
**Property Manager**

[keith.forshaw@livenation.co.uk](mailto:keith.forshaw@livenation.co.uk)