

## Creating Safer Working Environments in Complex Locations



### The Challenge

Our client, Tower Demolition had been chosen to deliver major construction project within the O2 Arena, demolishing, reconstructing and refitting a popular nightclub. Phase 1 of the project was scheduled to take 11 weeks from October 19th to December 21st 2018.

The demolition contractors had been asked to demonstrate compliance with a range of health and safety requirements and environmental legislation, including The Control of Noise at Work Regulations 2005 (Noise Regulations 2005). This was especially important for this location as there were neighbouring businesses with staff working on site and hundreds of people visiting restaurants and businesses at the venue.

In addition to the impacts on people in and around the demolition site, which is measured as Vibration Dose Values (VDV), the firm also needed to monitor PPV (Peak Particle Velocity) to ensure that nearby structures were not affected by the activity taking place.

### The Regulations

The Control of Noise at Work Regulations 2005 (Noise Regulations 2005) require employers to prevent or reduce risks to health and safety from exposure to noise at work. Employees have duties under the Regulations too. The Regulations require employers to:

- Assess the risks to your employees from noise at work;
- Take action to reduce the noise exposure that produces those risks;
- Provide your employees with hearing protection if you cannot reduce the noise exposure enough by using other methods;
- Make sure the legal limits on noise exposure are not exceeded;
- Provide your employees with information, instruction and training;
- Carry out health surveillance where there is a risk to health.

For residential buildings, the standard states that for cosmetic damage (cracking in plaster work etc.) to occur, a peak particle velocity of some 15 mm/s is necessary at a vibration frequency of 4 Hz; this rises to 20 mm/sec at 15 Hz, and thereafter the limit rises to 50 mm/s at 40 Hz and above.

# CASE STUDY



**First Choice Hire Ltd**  
*'Hire Made Simple'*

## Finding a Solution

First Choice Hire Ltd were asked to supply Fixed Continuous Noise, Dust & Ground Vibration monitoring equipment. We were chosen as a result of our investment in the very latest technology which sets us apart from our competitors. We are able to provide Class 1 Noise and Vibration systems which comply with IEC 61272 monitoring systems and our clients are able to view all their data in real-time via using our cloud based reporting which is accessed from our website. In addition, any alerts for exceeding noise and vibration parameters are notified to our clients via email. During the hire of our equipment our engineers are always in contact with our clients to ensure that everything is running smoothly and to answer any questions.

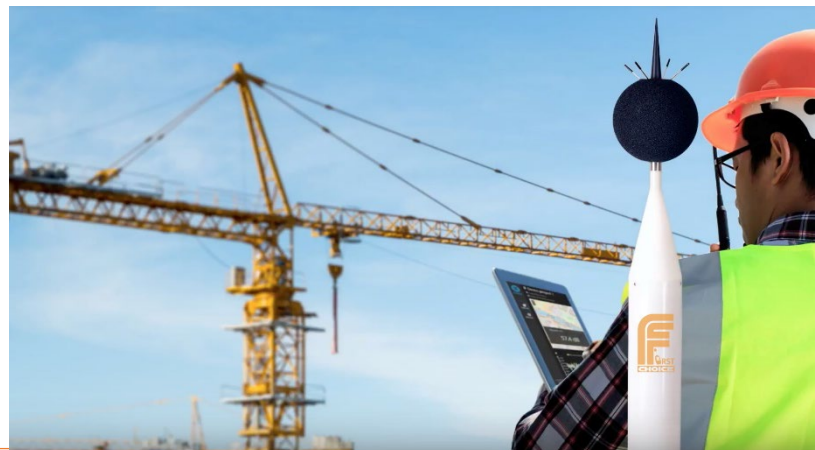


## Delivering a Solution

Our long-term relationship with technical market leaders Svantek means we are able to offer our clients access to the very latest monitoring systems. Through a careful evaluation of the site we were able to identify the most suitable systems to meet the requirements of our client and installed sophisticated equipment which was able to measure exposure to noise, dust & ground vibration for both demolition staff, and also for the neighbouring restaurant which remained open for business throughout the project. We were also able to set up our equipment to assess the impact on members of the public walking through the O2.

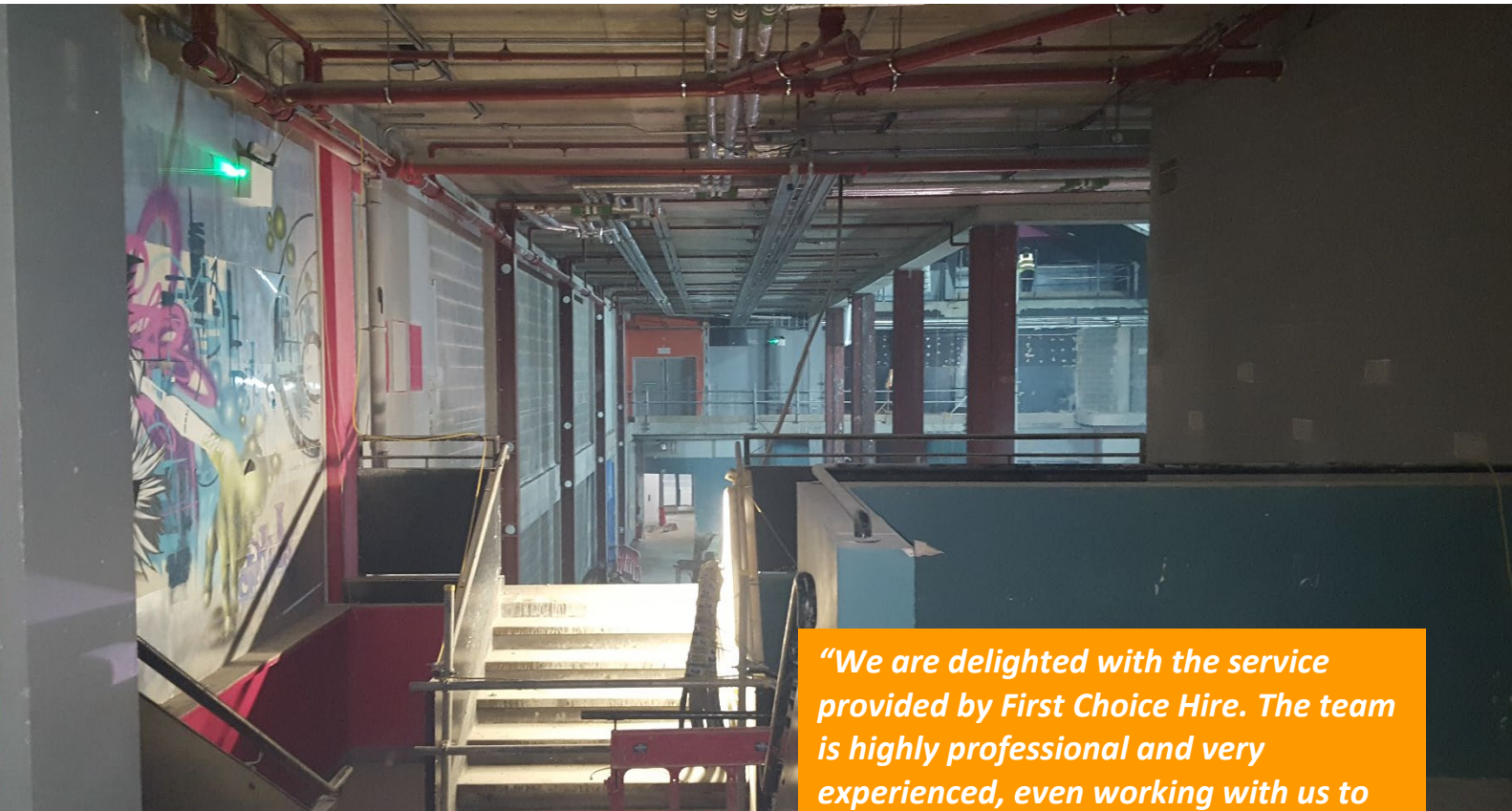
## The Results

The project was delivered ahead of schedule, reaching completion in 9-weeks and we were able to ensure that our client worked within the required legislative limits. There were no exceedances of noise, dust or ground vibration limits and there were no complaints received about any of the work which was taking place. The equipment we provided was able to offer real-time reporting and email alerts, together with additional monthly reporting coordinated by our team. It is our ability to provide these cutting-edge solutions which sets us apart from our competitors.



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[www.firstchoicehire.com](http://www.firstchoicehire.com)  
Tel: 0330 332 0654 (free)



Our client was delighted with the ease of installation, accessible reporting, continual monitoring and great support. As a result, we are now discussing further support for the contractor responsible for the redevelopment of the venue during Phase 2 of this project.

### **About Us**

At First Choice Hire our professional team have a wealth of experience across all working environments, providing technical support and expertise in instrument use and monitoring. We supply the latest technology for air sampling, noise & vibration monitoring requirements, manufactured by the world's leading brands including Casella and Svantek.

*"We are delighted with the service provided by First Choice Hire. The team is highly professional and very experienced, even working with us to ensure our environmental management plan was accepted by the relevant authorities.*

*Being able to see the real-time performance of both the equipment and our demolition works meant we could make changes to our activities as necessary.*

*We look forward to working with you again on the next project"*

## Contact Us

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