

Noise and Vibration Monitoring

Imagine being able to monitor your project's noise and vibration impacts in real-time. We can make that a reality, thanks to our automated monitoring technology. Automated monitoring of noise and vibration occurs almost systematically during the construction phase but also can be required at post completion stage of a project. Clients and stakeholders are able to access real-time data via a cloud database to access historical records, with audio

recordings also available to ascertain the cause of any exceedances noise.

Noise impacts can always be a challenge, especially when developments are in close proximity to the community

However, the biggest benefit to clients and stakeholders is the ability to access real-time data via a cloud database to retrieve historical records, with audio recordings also available to ascertain the cause where limits are exceeded.

By being proactive in managing noise and vibration from construction and demolition on sites, we can help clients mitigate any potential issues with stakeholders, such as neighbors, governments, and local authorities.

Our acoustics team can help you:

- Assess noise and vibration impacts due to construction and demolition activities
- Assist in establishing suitable criteria for projects based on local regulations or typical activities within a workspace
- Develop mitigation measures for activities that generate excessive noise and vibration
- Assess vibration impacts due to construction on heritage structures and critical infrastructure surrounding sites
- Co-ordinate with relevant stakeholders to develop noise and vibration management plans
- Predict construction noise and vibration levels and assessment against targets
- Conduct noise and vibration monitoring, including blast monitoring (where required), both attended and unattended





Physical Acoustic Testing

Stantec offers a range of services when it comes to physical acoustic testing which includes the following:

- Testing of walls and floor systems (Airborne and Impact)
- Testing of facade
- Measurements of internal background noise levels and acoustic parameters such as reverberation time, sound transmission index (STI), early decay time (EDT), clarity indexes, etc.
- External noise surveys including attended and unattended monitoring
- Measurements of vibrations for a range of industries
- Noise and Vibration monitoring for construction activities (long term and short term monitoring)
- Compliance testing for buildings, environmental and infrastructure projects

Leadership Team



OLIVIER GAUSSEN
GLOBAL ACOUSTICS LEAD, DIRECTOR



BASEL JURDY
ACOUSTICS DISCIPLINE LEAD,
PRINCIPAL, NORTH AMERICA



FRANK BABIC
ACOUSTICS PRACTICE AREA LEAD



ALEXANDRE BRIOT
ACOUSTIC TEAM LEAD, QUEBEC



MATTHEW BARLOW
ACOUSTIC TEAM LEAD, UK



JONATHAN CHUI
SENIOR NOISE SPECIALIST



Olivier Gaussen

GLOBAL ACOUSTICS LEAD,
DIRECTOR
Olivier.Gaussen@stantec.com



Olivier joined Stantec in 2009 as the acoustic section manager in the Sydney office. Since 2012, he's served as our national acoustics coordinator.

His experience and understanding of other disciplines relating to acoustics—such as mechanical, electrical, hydraulics, architectural, and structure—allows him to provide an integrated approach to acoustic design. He can ensure that a project's acoustic performance requirements are met without compromising the design intent.

Outside work, Olivier enjoys spending time with his family: Georgina and their two boys Noah and Leo. Olivier also likes to play beach volleyball which reminds him of the years when he used to play in the national league in France. Other than that, he enjoys skiing, playing the drums, and catching up with friends around a glass of Pinot Noir.



Basel Jurdy

ACOUSTICS DISCIPLINE LEAD,
PRINCIPAL, NORTH AMERICA
Basel.Jurdy@stantec.com



Basel believes that listening to a client's desired acoustical end results without preconceived solutions in mind is crucial to achieving a design that enhances a space. Asking questions invites the client to reveal more. Listening to answers and finding the best solutions for that unique project brings the client's vision to life.

With more than 27 years of experience, Basel is a dynamic project leader and a natural mentor. His advice to young acousticians is to listen first. Then, educate the team on the art and science behind acoustics, so it becomes apparent why standard acoustical treatments are not the right solution for every project.

An engineer by schooling, Basel pursued a career in acoustics where he discovered the artist in himself. His activities away from the office reflect his strategic side as an avid tennis player and his artistic side through ballroom dancing. He taps both attributes to create environments that delight project owners and users alike.



Frank Babic

ACOUSTICS PRACTICE AREA LEAD,
ONTARIO

Frank.Babic@stantec.com



Frank has a deep passion for integrating acoustics, noise, and vibration solutions into the variety and depth of projects offered by Stantec. This stems from combining his passion for music (has a solo project called High Park Society) with his civil engineering education—leading to unique, high-quality engineering approaches for his clients.

As a licensed professional engineer, Frank has over 20 years of engineering consulting experience. Areas of technical expertise include engineering consultation in environmental noise, transportation noise, building acoustics, vibration, and monitoring (noise and vibration). Frank is a recognized subject matter expert in his field, and he's presented at numerous technical conferences in Canada and the US.

As Stantec's Acoustic practice lead, Frank leads a core team of specialists and experts in the field of acoustics, noise, and vibration. This group of highly-specialized individuals offer quality engineering services and client-orientated focus to ensure that we deliver our solutions to the quality expected by Stantec and its clients.



Alexandre Briot

ACOUSTIC TEAM LEAD,
QUEBEC

Alexandre.Briot@stantec.com



Alexandre is the team leader for the acoustics and vibration services within the province of Quebec (Canada). With more than 21 years of design experience in acoustics, his expertise includes, in particular, acoustic impact studies which, utilize computer modeling, studies concerning architectural acoustics or studies related to rail transportation.

In addition, over the years, Mr. Briot has acquired great expertise in the field of soundproofing of buildings and ventilation. To this end, he is responsible for the acoustic part of the projects inside the Fixed Equipment Project Office of the Metro [partnership Stantec and Société de transport de Montréal (STM)] which aims to renew the fixed equipment of the metro in Montreal, including the repair of ventilation stations, the installation of large-capacity generators or even the construction of the new STM control center. In addition, he participated in the project to extend the metro line to Laval and Blue line with regard to the soundproofing of new ventilation stations, jet fans and ventilation of generator sets. Outside the office, you may come across Alexandre on his motorbike. He likes to discover new landscapes by traversing winding paths like the Alps. In terms of his other hobbies, soccer or kickboxing takes up some of his time.



Matthew Barlow

SENIOR ASSOCIATE,
ACOUSTIC TEAM LEAD, UK
Matthew.Barlow2@stantec.com



Matt is an acoustic consultant with a broad range of experience in the assessment of noise and vibration for a diverse range of private and public sector clients in the UK and overseas. He has particular expertise in environmental acoustics and building acoustics demonstrated by his work on residential and mixed use projects, infrastructure projects, industrial facilities, schools, healthcare as well as commercial, education, and energy generating facilities.

He has performed numerous environmental noise impact assessments to support planning applications and is familiar with a wide range of policy, standards and guidance including NPPF, NPSE, ProPG, BS8233, BS5228 and BS4142. In addition to more traditional methods of assessment he is an expert in the use of computer models. His involvement in buildings acoustics projects has provided valuable experience and knowledge in creating acoustically appropriate environments through the control of building services noise and vibration, noise and vibration intrusion and sound transmission between spaces.

Design work has been verified by on-site commissioning including pre-completion sound insulation tests, noise intrusion tests on shell constructions and acoustic measurements of building services noise.



Jonathan Chui

SENIOR NOISE SPECIALIST,
ALBERTA
Jonathan.Chui@stantec.com



Jonathan is a professional engineer with over 19 years of consulting experience in the acoustic industry. He specializes in noise impact assessment, regulatory policy, engineering noise control, source measurement, complaint investigation, baseline noise monitoring, and vibration measurements. He has completed numerous noise assessments for Canadian and international projects in North America, Central American, South America, and Africa.

Over the last decade, Jonathan has lead the Stantec western Canada noise team to serve different industrial and commercial clients in the three western and central provinces of British Columbia, Alberta, and Saskatchewan. The noise assessment projects cover different sectors such as renewable energy, conventional power generation, oil and gas, mining, military, manufacturing, and transportation.

Jonathan's passion includes photography and intrepid travel to far away countries. While at home in Calgary, he enjoys hiking, skiing, and cycling in the Canadian Rockies.

Communities are fundamental. Whether around the corner or across the globe, they provide a foundation, a sense of place and of belonging. That's why at Stantec, we always design with community in mind.

We care about the communities we serve—because they're our communities too. This allows us to assess what's needed and connect our expertise; to appreciate nuances and envision what's never been considered; to bring together diverse perspectives so we can collaborate toward a shared success.

We're designers, engineers, scientists, and project managers innovating together at the intersection of community, creativity, and collaboration. Balancing these priorities results in projects that advance the quality of life in communities across the globe. Stantec trades on the TSX and the NYSE under the symbol STN. Visit us at stantec.com or find us on social media.

