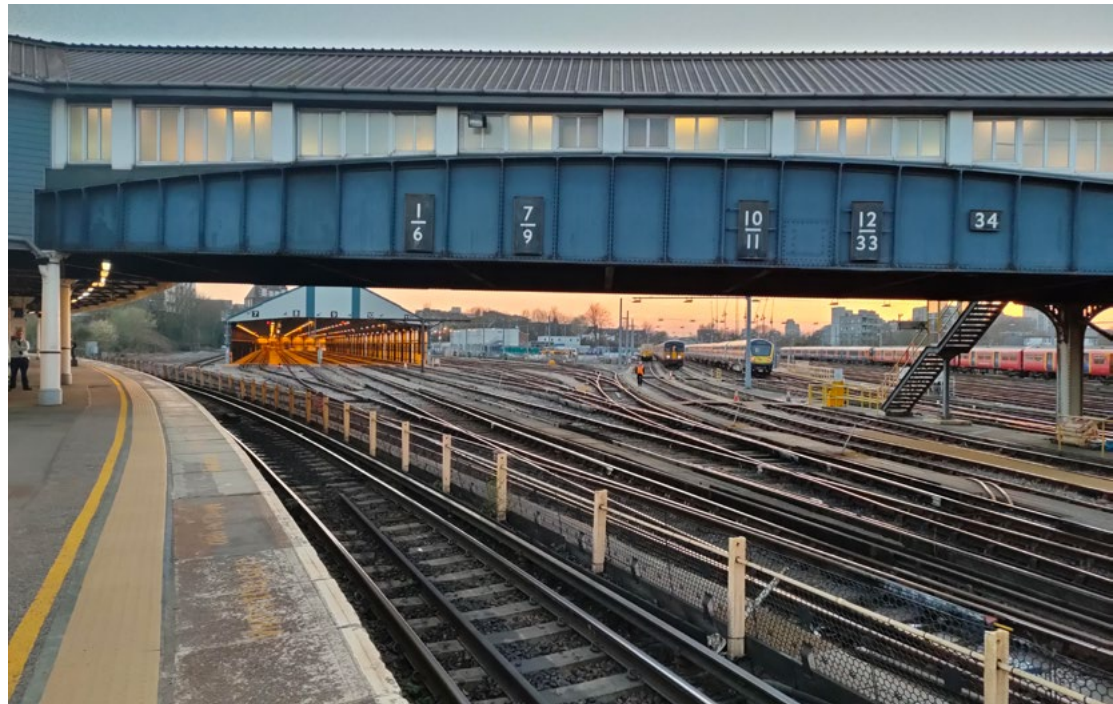


RAILWAYS AND SYSTEMS

Noise, Acoustics, and Vibration

-  Acoustics, Noise & Vibration
-  Environmental Noise & Vibration
-  Air Quality
-  Ventilation
-  Structural & Cladding Wind Loading
-  Pedestrian Wind Comfort
-  Solar Impacts
-  Rain Infiltration
-  Sand Drifting
-  Construction Impacts
-  Environmental Impact Assessments
-  Land-Use Planning
-  Resiliency Planning



Noise and vibration from railway infrastructure operations can be a major concern to nearby residents and local authorities. They are also significant risk elements for Promoters to address in gaining planning approval for new projects.

Our experienced in-house team of specialists manage noise and vibration issues on some of the UK's most complex rail projects. With a history of providing high quality advice using state-of-the-art prediction tools and monitoring solutions over entire project life-cycles, we're uniquely positioned to support project delivery teams at each stage of any project.

Railway Specialist Experience

Our full-service team has unrivalled experience in and understanding of acoustical issues with major railway

project delivery, including high speed, heavy, metro, and light rail schemes. We have assisted in the planning, detailed design, construction, commissioning, and asset management on key UK and international railway projects that include:

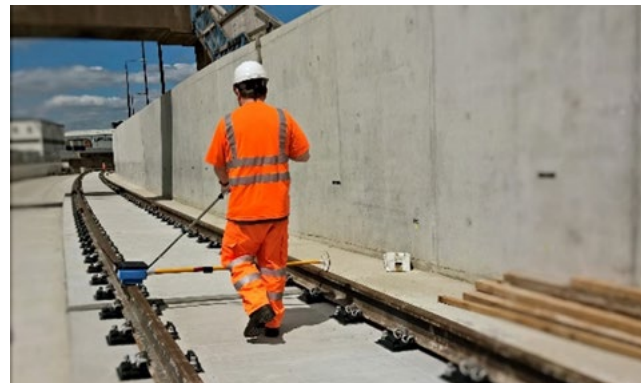
- Purple Line LRT, Tel Aviv;
- Klang Valley Mass Rapid Transit, Kuala Lumpur;
- Sydney Metro, NSW;
- High Speed 2;
- Crossrail;
- High Speed 1;
- Thameslink Programme;
- East London Line;
- LU Bond Street Station Upgrade; and
- Docklands Light Railway.

Services

Our expertise to the railway sector includes:

- airborne noise, groundborne noise, and groundborne vibration surveys;

- prediction and assessment of operational airborne noise and groundborne noise/vibration;
- input to design of mitigation measures, including wayside noise barriers, rail dampers, track systems, and rolling stock control measures;
- Rail Roughness surveys;
- Track Decay Rate testing;
- testing, commissioning, and operational management of assets (e.g., noise barriers, tunnel ventilation, stabling areas and depots, electrification, and stations);
- strategic advice to promoters, planning authorities, operators, infrastructure maintainers, regulatory authorities, and researchers;
- construction noise and vibration management; and
- expert witness testimony.



Accreditations

Southdowns is a corporate member of the Association of Noise Consultants, is accredited under the Achilles RISQS, Achilles UVDB, Achilles CAS Desktop and Constructionline pre-qualification schemes. Consultants are affiliated with the Institute of Acoustics and hold Construction Skills Certification Scheme (CSCS) cards.

Our Quality Management System is operated and certified to BS EN ISO 9001:2015 by a UKAS accredited organisation for the provision of core environmental consultancy and monitoring services. We also operate an Environmental Management System that is certified to ISO 14001:2015.

Want to know more?

Contact us for a complementary initial consultation of your rail project's noise, acoustics, and vibration needs.

Contact enquiries@southdowns.eu.com or visit www.southdowns.eu.com/contact

Looking for other services? Our recent merger with RWDI, an international leader in climate and performance engineering, allows us to offer a wide range of related services for our rail clients.

If you want to know more, contact solutions@rwdi.com or visit rwdi.com.

