



southdowns

RAILWAY NOISE AND VIBRATION

Noise and vibration from new railway infrastructure on the surface (such as new trackwork, depots, stations and tunnel ventilation shafts) can be a major concern to nearby residents and local authorities, and a significant risk element for Promoters to address in gaining planning permission for their projects.

Although out of sight, new sub-surface sections of railway can give rise to groundborne vibration and noise, an effect manifested by the propagation of vibration from trains running in tunnels, through the overlying ground and into buildings on the surface. Elevated railways can also give rise to structure radiated noise effects. In both cases, careful track system design is required to reduce the effects to within acceptable limits.



Who are Southdowns?

Southdowns is an established independent firm of noise and vibration specialists with extensive project experience in the railway sector providing practical advice on noise and vibration issues for organisations in both the public and private sectors, including: planners; consulting engineers; developers; promoters and project management organisations; contractors; and local planning authorities.

Southdowns is a corporate member of the Association of Noise Consultants, is accredited under the Link-up, UVDB and Constructionline pre-qualification schemes, and holds a Network Rail framework agreement for pre-qualified suppliers. Consultants are affiliated with the Institute of Acoustics and hold Construction Skills Certification Scheme (CSCS) cards and/or London Underground Permit to Entry (PTE) cards.

more

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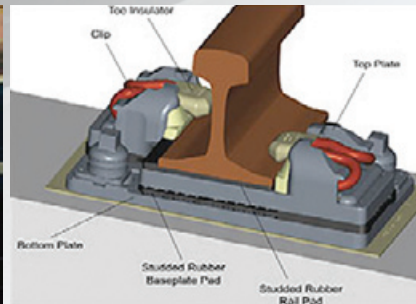
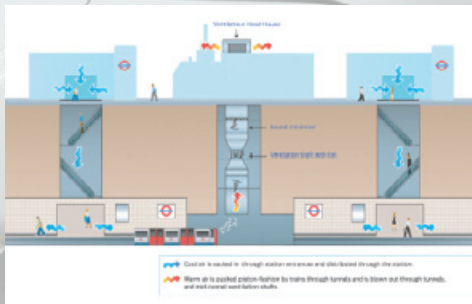
Southdowns Project Experience

Southdowns is recognised as one of the UK's leading firms in railway noise and vibration consultancy, with unrivalled experience and understanding of acoustical issues associated with major project delivery. Staff have extensive experience in the planning, design, construction, commissioning, asset management and provision of expert testimony on a number of key UK and international railway projects including:

- Crossrail
- West Coast Route Modernisation
- Channel Tunnel Rail Link
- East London Line
- Thameslink Programme
- St Pancras International Station
- Washington Metro, USA
- DLR City Airport Extension
- DLR Woolwich Extension
- High Speed Railway, Taiwan
- London Underground's Cooling the Tube Programme

- LU Tottenham Court Road Station Upgrade
- Croydon Tramlink
- Dublin LRT, Rep. Ireland
- Speedrail, Australia
- Lincoln Station re-modelling
- Rail Link Engineering (High Speed 1)

Senior staff were also seconded to Rail Link Engineering for a number of years during the design and construction of High Speed 1 (Channel Tunnel Rail Link), managing the in-house team of specialists.





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Southdowns Services

Southdowns' extensive services to the railway sector cover construction and operational aspects for both underground and overground railways, including:

- feasibility studies
- route optioneering
- baseline noise and vibration studies
- development of calculation procedures and design aims
- impact assessments
- Section 61 (Control of Pollution Act 1974) Consent Applications
- groundborne noise & vibration
- ventilation shaft / depot design
- noise barrier design and testing
- identification and specification of mitigation measures
- permanent way detailed design
- maintenance strategies and asset management
- commissioning / compliance studies
- peer review / due diligence
- expert witness
- rolling stock tests and commissioning

Contact us

If you are interested in learning more about Southdowns noise and vibration services, or would like to discuss project specific requirements with us then please contact **Rick Methold or Patrick Williams on +44 (0) 1273 488186**, or by **e-mail enquiries@southdowns.eu.com**. Detailed CVs are available on request.

For further information on specific project experience, please visit our web-site. www.southdowns.eu.com/projects