

SLR Heggies Rail Profile

SLR Heggies has a long history of involvement in railway projects and over the course of many years has earned a respected and highly credible reputation with regulatory authorities and with the community in general. Most importantly, we have a practical understanding of the constraints applying to railway projects and are familiar with the engineering practicalities and both the indirect and direct costs associated with the implementation of environmental control measures. SLR Heggies offers services in the following specialist engineering and environmental fields:

- Acoustics & Vibration
- Environmental Management
- Air Quality / Dust / Odour
- Hazardous Materials
- CFD & Ventilation Studies
- Climate-Meteorology Analysis
- Structural Dynamics
- Environmental Monitoring
- Water Quality
- Site Remediation
- OHS / Occupational Hygiene
- FE Analysis, Fatigue
- Wind Engineering
- Energy Efficiency / ESD
- Ground Contamination
- Lighting Studies
- Solar Studies
- Risk Assessment



SLR Heggies Rail Project Area And Disciplines

Environmental Noise and Vibration

- Environmental Assessment (EIS, REF, SEE)
- Community Consultation, Noise Simulations
- Baseline Noise & Vibration Measurements
- Operational Noise & Vibration Management Plans
- Construction Noise & Vibration Management Plans
- Noise & Vibration Monitoring During Construction

Rail-Track / Rail-Vehicle Studies

- Rail Vehicle Compliance Tests
- Locomotive Vibration & Noise Control
- Modal Analysis
- Sound Intensity Measurements
- Rail Vehicle Ride Measurements
- OHS Noise Assessments
- Wheel Condition Noise & Vibration Impacts
- Wheel Queal Studies
- Rail Condition Noise & Vibration Impacts

Noise Barriers

- Detailed Noise Modelling For Noise Barrier Design
- Noise Barrier Effectiveness Simulations & Optimisation
- Community Consultation
- Pre & Post-Installation Noise Measurements

Building and Infrastructure Over Rail Lines

- Regenerated Noise & Vibration Predictions
- Noise & Vibration Measurements
- Rail Line Vibration Mitigation
- Floating Slab Design
- Building Vibration Isolation
- Underground Station Design

Underground Rail Projects

- Regenerated Noise & Vibration Predictions
- Noise & Vibration Measurements
- Rail Line Vibration Mitigation
- Floating Slab Design
- Cologne Eggs / Ballast Mats

Elevated Rail Lines

- Bridge Dynamics & Vibration Control
- Radiated Noise From Elevated Structures

Selected SLR Heggies Rail Projects

Environmental Noise and Vibration

- Epping to Chatswood Rail Line – Sydney
- Northgate to Petrie Track Upgrade Noise Impact Assessment & Detailed Noise Barrier Design – QLD
- Metropolitan Rail Expansion Program (North West Rail Link, South West Rail Link, CBD Rail Link) – Sydney
- Salisbury to Kuraby Track Upgrade Noise Impact Assessment & Detailed Noise Barrier Design – QLD
- Ultimo-Pyrmont Light Rail – Sydney
- Network Noise Management Plan – Shorncliffe/Pinkenba Line, Ipswich Line, Mackay / Townsville Region
- Rail Clearways Program (Cronulla Line, Kingsgrove to Revesby Quadruplication, Quakers Hill to Vineyard Duplication, Macdonaldtown Train Stabling Facility, Macarthur Fourth Platform, Liverpool Turnback) – Sydney
- Central Circular Quay Viaducts – Sydney
- SkiTube Viaduct Vibration Isolation Refurbishment – NSW
- New Southern Rail Line – Sydney's Airport Link
- Port Botany Freight Line – Sydenham Noise Barriers
- Queensland Rail Metropolitan Noise Management Units (Various Sections of Metropolitan Network)
- Westrail Viaduct (Hong Kong) Radiated Noise Study
- Fisherman Islands Line – Brisbane
- Mayne to Northgate Noise Barrier Design – QLD
- Coomera to Ormeau & Helensvale to Robina Track Upgrade Noise Impact Assessment & Detailed Noise Barrier Design – QLD
- Standard-Guage Rail Link to Fisherman Island IAS & Noise Barrier Design – QLD

Building and Infrastructure Over Rail Lines

- Vibration Control for Microelectronics Facility above Olympic Rail Line Loop – Sydney
- ANA Hotel & John Maddison Tower (Courts) – Sydney
- GROCON – Sydney
- Federation Square – Melbourne
- Subiaco Urban Renewal Project & Lakeside Cinema Complex – Perth
- Singapore Circle Line – Underground Station Acoustics

Rail-Track / Rail-Vehicle Studies

- Commissioning Tests for Various Locomotives & Wagons
- QR Coal Wagon Low Frequency Noise Control
- QR 1550/2300 Locomotive Silencer Design
- ABB Variotram Noise & Ride Assessments
- KCRC Westrail Railcar Acoustic Specification
- QR 2400 Class Locomotive Cab Noise Design
- 82 Class Acoustic Louvre investigations & Commissioning – Torsional Vibration Investigations
- 90 Class & NR Class Compliance Reviews
- 81 Class Low Frequency Noise Investigations
- PRP Wheel Condition Research & Measurement Study
- SRA Wheel Squeal Review & Recommendations
- RIC Rail Corrugation / Rail Grinding Measurement Study

Underground Rail Projects

- Epping to Chatswood Rail Line – Sydney
- MetroPitt Noise & Vibration Feasibility - Sydney
- New Southern Rail Line – Sydney's Airport Link
- Ultimo-Pyrmont Light Rail
- Star City Casino / Gateway Building Vibration Control
- Olympic Rail Line Loop – Ballast Mat Design
- New MetroRail-City – Perth
- Singapore Circle Line (Stages 4 & 5)
- UAE 'Blue' & 'Purple' Lines – Dubai

Visit us at www.heggies.com or call **1 300 434 443** to find out more.

Heggies Pty Ltd is a member of the International SLR Group
www.slrconsulting.com