

Innovation | Sustainability | Social Responsibility

# RAILWAY ASSET MANAGEMENT

#### CASE STUDIES





ECSL have a long history of working collaboratively with preserved, private and former railway asset owners such as Sustrans and Railway Paths Limited

ECSL bring decades of knowledge and experience to asset management of this often-iconic infrastructure, marrying the latest technologies with a deep understanding of historical construction techniques to ensure our solutions are both efficiently planned and respectfully implemented.

ECSL deliver around 200 bridge inspections and assessment each year on railway and related assets. This data is then used by our multi-disciplinary teams to complete the design of repair works, development of asset management plans or feasibility studies for upgrades to that infrastructure.

#### INTRODUCTION

#### CONTACT: DAVE.GENT@ENGINEERINGCSL.COM

FOR MORE INFORMATION ON ANY OF OUR SERVICES PLEASE VISIT US ON THE WEB AT: WWW.ENGINEERINGCSL.COM



ECSL have worked alongside Peak Rail over a 5year period, providing a range of structures asset management services, from inspections and assessments to emergency repair works design following the significant flooding in 2019



## PEAK RAIL

#### DERBYSHIRE

STRUCTURES INSPECTIONS & ASSESSMENT

ASSET MANAGEMENT PLANNING



NORTH YORKSHIRE MOORS RAILWAY

> STRUCTURES ASSESSMENT

ORR LIAISON

ECSL assisted the NYMR with asset management advice for sensitive structures to facilitate safe running of the line

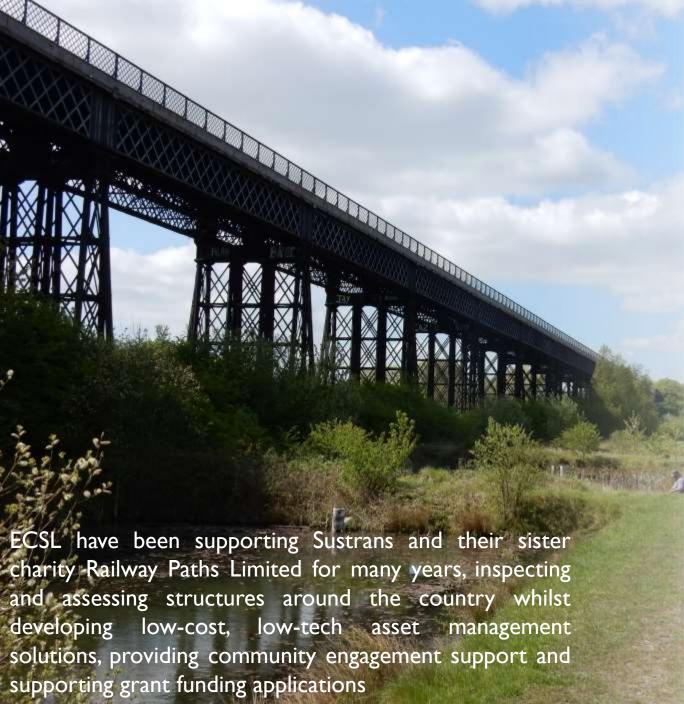




#### NEW RAILWAY BRIDGES

#### BRIDGE DESIGN

A number of our projects have involved the replacement of bridges and structures in heritage settings, meaning that we have had to adopt and adapt the styles and designs of the past for modern design standards .





### SUSTRANS / RAILWAY PATHS LTD

NATIONWIDE

STRUCTURES INSPECTION & ASSESSMENT

RESEARCH & DEVELOPMENT





### WHITBY CYCLE PATH

DESIGN OF CYCLE PATH ALONG DISUSED RAILWAY

ECSL were contracted to undertake all structural examinations, develop an asset management plan and complete the feasibility study for returning the line back to service as a cycle path



### NENE VALLEY RAILWAY

#### STRUCTURAL INSPECTION & ASSESSMENT

On behalf of the Nene Valley Railway Company Ltd, ECSL undertook an inspection for assessment of a large number of historic underbridges along the NVR route. This required the production of detailed condition reports and an Asset Management Prioritisation List for the route, allowing the NVR Co. Ltd to prioritise their repair works. Our team also performed a structural assessment on the bridges to Network Rail standards using the Level 0 Assessment Tool, for conventional 25mph running and for authorised higher-speeds, at the request of the client.

The Weardale Railway inspections and assessments were carried out as part of the asset management strategy of the heritage line.

ECSL worked closely with Inspire Structures Ltd to ensure effective site data transfer between our site teams and the structural engineers in the office. Outlining the necessary data needed for the structural assessments from the start streamlined the inspection and assessment process. Both teams played key roles in successfully delivering the package of works on time and on budget.





### WEARDALE RAILWAY

STRUCTURAL INSPECTION & ASSESSMENT



### WELSHPOOL & LLANFAIR LIGHT RAILWAY

STRUCTURAL INSPECTION & ASSESSMENT

On behalf of the Welshpool and Llanfair Light Railway trust, ECSL were responsible for scoping the inspection for assessment activities and undertaking the assessment of bridge structures, prioritising asset management activities and designing repairs.



ECSL were contracted to perform a visual inspection of bridges along the full length of the 2.5 mile long Avon Valley Railway route. These works included the preparation of a detailed condition report for all structures and an asset management prioritisation list, to summarise works needed and allow the AVR to allocate their funding, workforce and resources efficiently. BRIDGE VISUAL INSPECTIONS

RAILWAY



### BOULBY MINE

#### NORTH YORKSHIRE

BRIDGE, TUNNEL AND CULVERT INSPECTIONS

REPAIR SPECIFICATION & ASSET MANAGEMENT PRIORITISATION

On behalf of ICL and Trackwork, ECSL performed an inspection of the bridges, tunnels and culverts on the Boulby Mine branch, between Loftus and ICL Boulby Potash Mine. The works included the inspection of a number of historic rail structures subject to 25T freight axle loadings, and a detailed condition report and asset management prioritisation list was produced for the route.