

Our belief | Our work | Our focus





**There are many big
challenges facing the
construction industry**

**We're helping to
address challenges in
a collaborative way**

collaboration

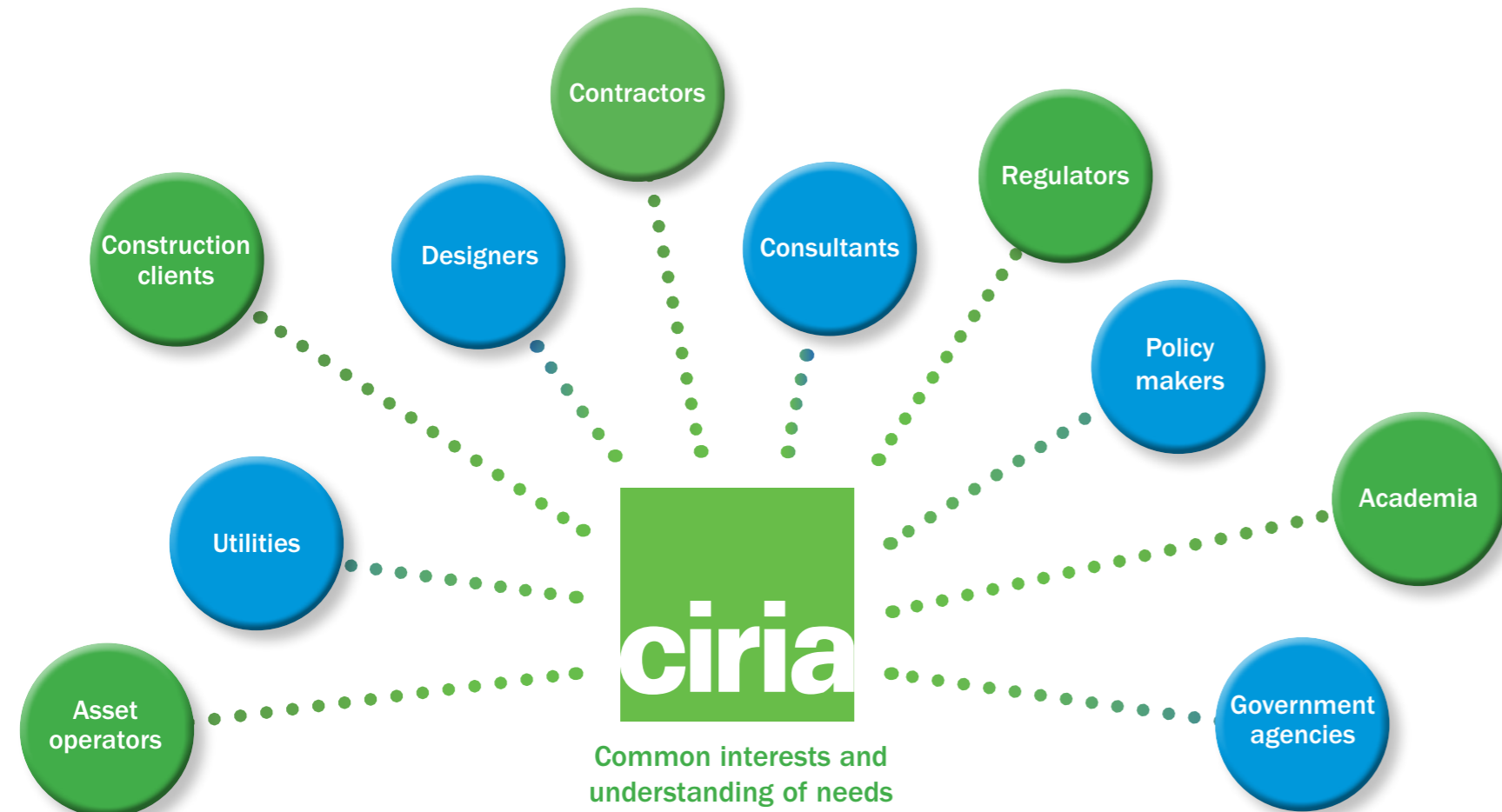
1. The action of working together, especially in a joint intellectual effort
2. something created by working jointly with another or others

**We help improve the performance,
quality, efficiency and safety of
the built environment through
collaborative working**

How do we do it?



As a neutral, independent, not-for-profit body, we link organisations with common interests...



...and facilitate a range of collaborative activities that help improve the industry



Our heritage

60s

Since 1960, working with our members and the wider industry, we have delivered nearly 1,000 collaborative projects, providing authoritative guidance and helping to solve common industry challenges.

CERC (Civil Engineering Research Council) was born with the aim of raising money from industry to undertake collaborative research. In 1967 CERC became CIRIA, reflecting its broader construction remit – still relevant today. R&D work started on a series of practical guides on Piling, leading to the 'PG Piling series' that became THE industry standard for decades to follow.

70s

R64 – Noise from construction laid the foundations for CIRIA's health and safety guidance by providing an introduction to the practice of noise management.

R79 – Tunnelling – improved contract practices outlined good practice in successful tunnelling.

R101 – Rock reinforcement provided engineers with guidance on the complete design process.

80s

Work on *Scope for control of urban runoff* begun, marking the start of CIRIA's influential work in sustainable drainage.

CIRIA published *R104 – Design of retaining walls embedded in stiff clay* – a milestone report which set out the design process for geotechnical structures.

Report B10 – Use of vegetation in civil engineering marked the start of work relating to biodiversity in buildings and infrastructure.

Research on quarried rock slope protection begun, demonstrating CIRIA's international collaborative project management expertise.

R97 – Trenching practice improved safe design and working across the industry.

90s

SP78 – Building on derelict land was published, leading to suite of guidance on contaminated land that is still being advanced today.

CIRIA's suite of site practice guides was expanded with *SP130 – Site safety handbook*.

International collaboration continued with the launch *R153 – Beach management manual*.

2000s

C502 – Environmental good practice on site handbook launched with huge industry interest, providing a benchmark of what good practice should be.

The *Rock Manual* was published, once more showcasing CIRIA's international research capabilities.

Work on UXO (unexploded ordnance) progressed in conjunction with the HSE (Health and Safety Executive) and other key stakeholder organisations.

Our focus

Productivity

Building information modelling (BIM)
Lean processes

Health and safety

Site health and safety
Urban design
Safer design

Environment

Environmental good practice on site
Ecology and biodiversity
Green infrastructure

Flood risk and surface water management

Sustainable drainage systems
Water sensitive urban design
Levees design and management

Technology

On-site mobile 'apps'

Civil and ground engineering

Ground water control
Retaining walls
Ground anchors

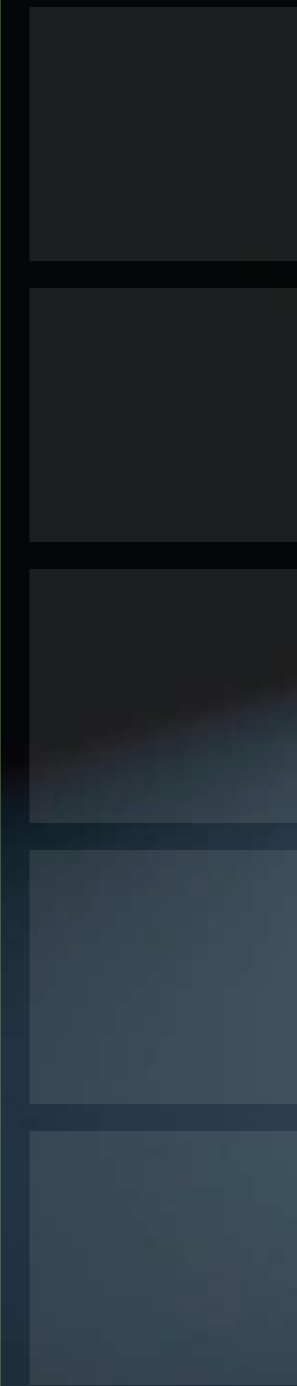
Contaminated land

Volatile organic compounds
Unexploded ordnance
Asbestos

Infrastructure asset management

Bridges, tunnels, dams and reservoirs
Asset monitoring
Inspection and maintenance

Activity spotlight



Climate change mitigation and adaptation

Our work in this area will help to deal with the global changes that have already been set in motion, lowering the risks posed by the consequences of climatic changes.

Our focus includes the mitigation of flood risk, and the management of surface water. We also provide guidance on the delivery of green building and green infrastructure components, helping to sustain biodiversity and natural processes.



Sustainable Drainage Systems (SuDS)

SuDS help to manage flood risk and water quality and provide great places to live, work and play. With the need for SuDS greater than ever before, www.susdrain.org provides up-to-date guidance, information, case studies, and discussion forums that help to underpin the delivery of SuDS.

In parallel, we are updating the highly acclaimed *SuDS manual (C697)* to provide further crucial industry guidance.

Increasing productivity

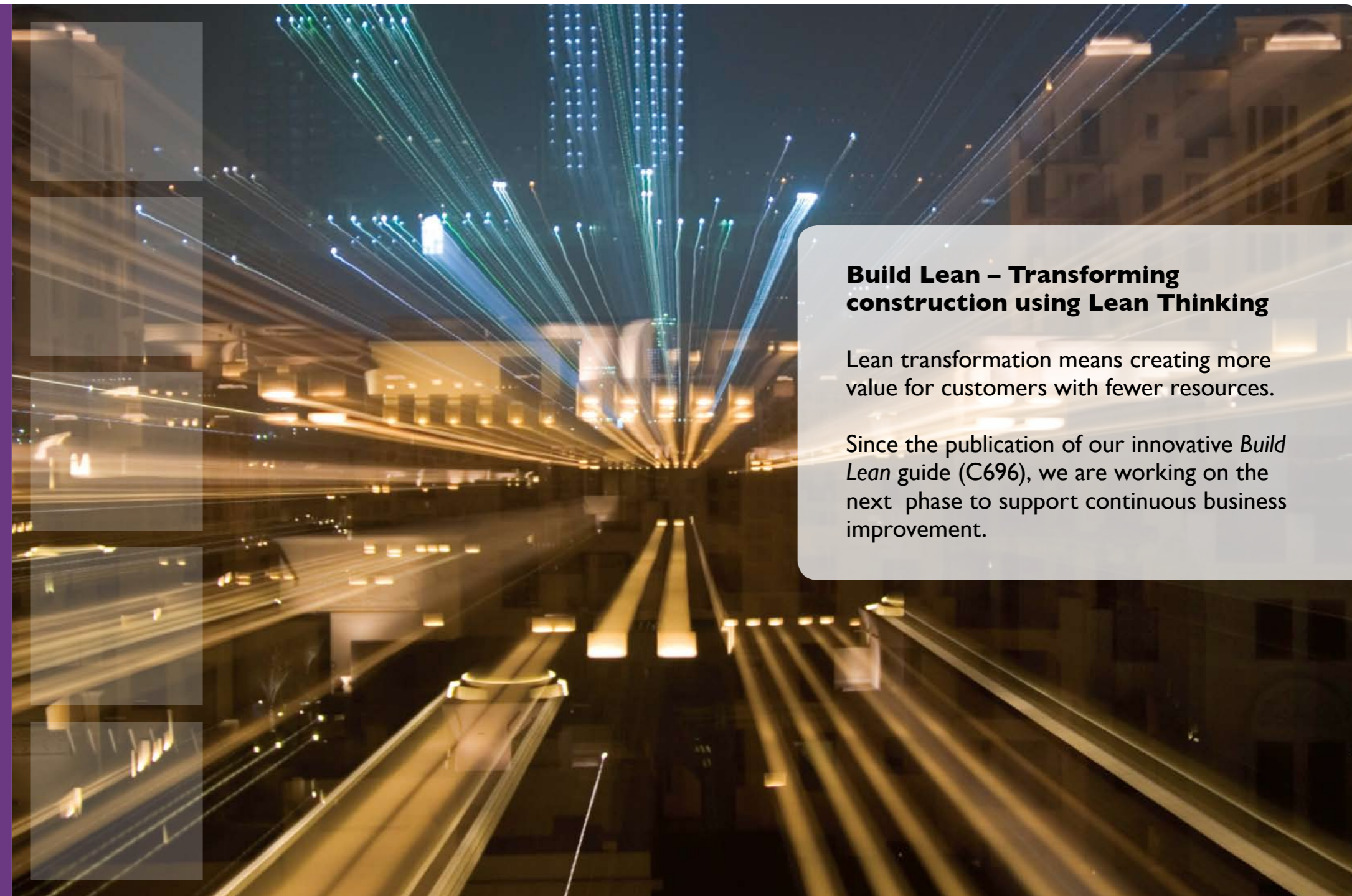
Economic pressures demand ever more efficient solutions, so improving the way things are done is imperative for enhancing productivity – and profitability.

We are working in a range of emerging areas, from our BIM (building information modelling) workshops, to the control of risk, as well as guidance on lean construction processes.

Build Lean – Transforming construction using Lean Thinking

Lean transformation means creating more value for customers with fewer resources.

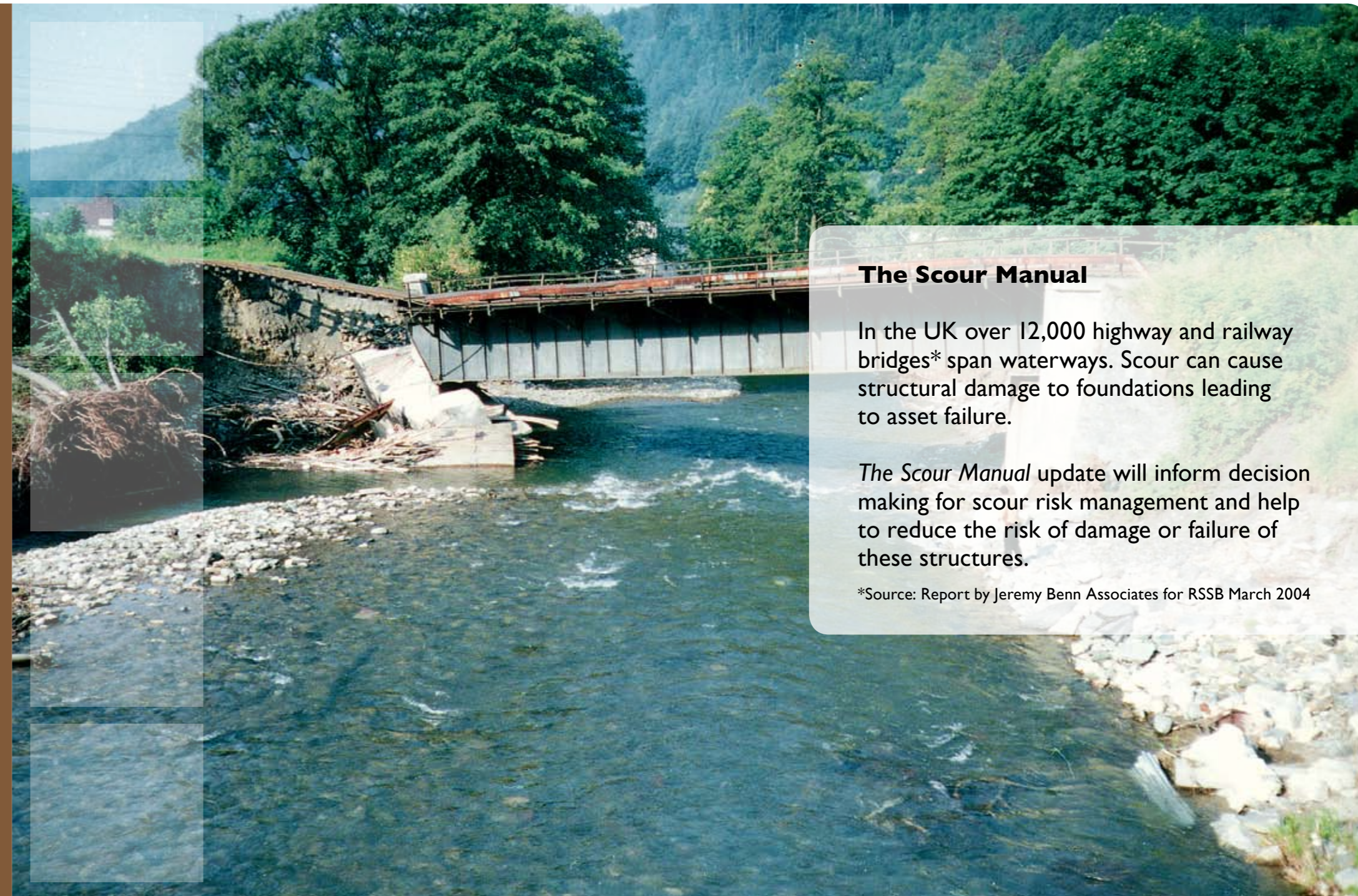
Since the publication of our innovative *Build Lean* guide (C696), we are working on the next phase to support continuous business improvement.



Maintaining ageing infrastructure

It is no secret that the UK's infrastructure is ageing – and sometimes failing. Our industry faces the daunting challenge of maintaining and modernising the systems on which we depend.

We are involved in a range of initiatives to help maintain key infrastructure assets such as bridges, tunnels, dams, culverts and reservoirs. From asset monitoring to inspection and maintenance, our work will help to reduce the vulnerability of ageing infrastructure assets.



The Scour Manual

In the UK over 12,000 highway and railway bridges* span waterways. Scour can cause structural damage to foundations leading to asset failure.

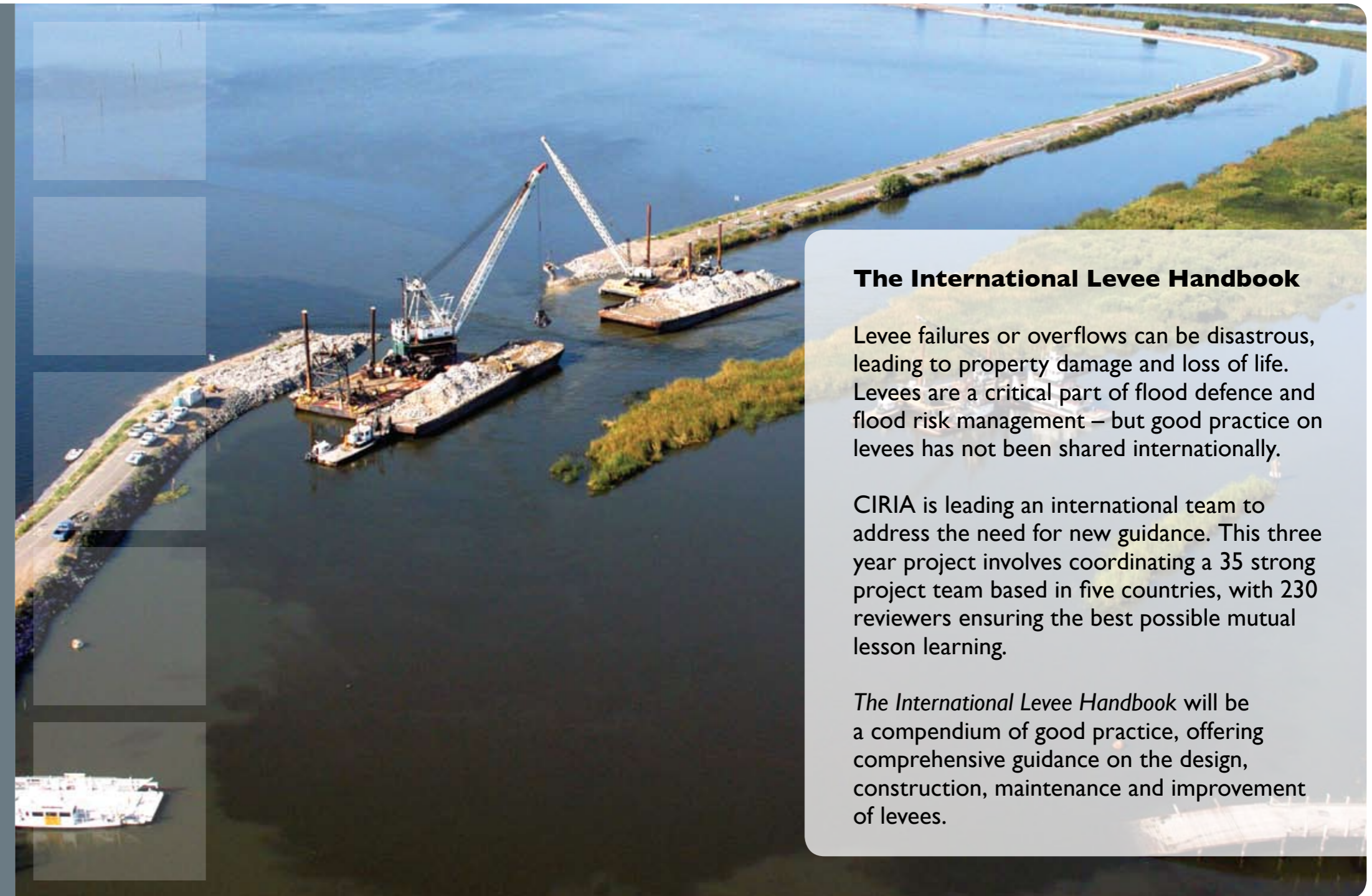
The Scour Manual update will inform decision making for scour risk management and help to reduce the risk of damage or failure of these structures.

*Source: Report by Jeremy Benn Associates for RSSB March 2004

Unlocking the power of collaboration

Collaborative working is at the heart of everything we do. We help to join up a fragmented industry, bringing disparate stakeholders together to work towards common goals.

We also help international teams to collaborate, leading to outcomes that can be adopted globally.



The International Levee Handbook

Levee failures or overflows can be disastrous, leading to property damage and loss of life. Levees are a critical part of flood defence and flood risk management – but good practice on levees has not been shared internationally.

CIRIA is leading an international team to address the need for new guidance. This three year project involves coordinating a 35 strong project team based in five countries, with 230 reviewers ensuring the best possible mutual lesson learning.

The International Levee Handbook will be a compendium of good practice, offering comprehensive guidance on the design, construction, maintenance and improvement of levees.

Sustainability and environmental management

Protecting and enhancing the economic value of the natural environment is critical if we are to create a sustainable society. Construction must become even more sustainable by minimising impacts on the surrounding environment and reducing the unnecessary use of resources.

Our activities are based on the premise that sustainable practices not only help the environment, but can also improve economic profitability as well as enhancing relationships between stakeholder groups. From our range of environmental guidance documents, to our involvement in the CEEQUAL sustainability scheme, we're helping the industry to understand and adopt sustainable construction practices.

Delivering biodiversity benefits through green infrastructure

There is a growing movement to reverse biodiversity decline, yet clear messages on how to maximise the opportunities presented by construction projects are hard to find.

By way of response, *Delivering biodiversity benefits through green infrastructure (C711)* provides clear, practical guidance that will help industry to deliver a better, more bio-diverse built environment.



Contaminated land remediation

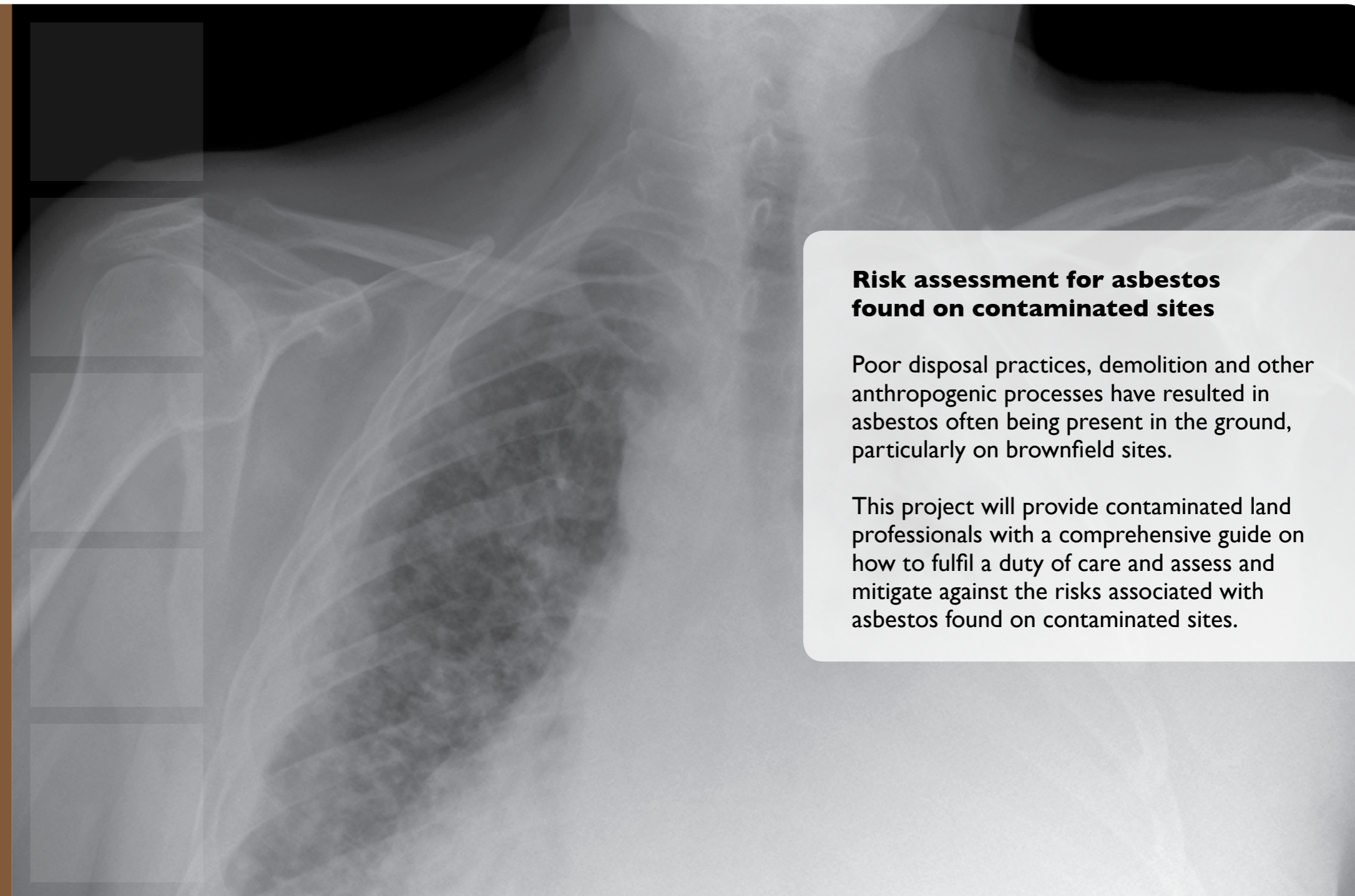
With growing pressure on the availability of land for development, brownfield sites emerge time and again as viable options. Although these sites are often well situated, the hidden dangers of contamination are an on-going concern.

Our contaminated land programmes have helped practitioners involved in brownfield regeneration projects for over 20 years. Through over 40 good practice guides and via the Local Authority Contaminated Land network and Brownfield Risk Management Forum, we continue to work with industry to help improve the way brownfield site risks are assessed and managed.

Risk assessment for asbestos found on contaminated sites

Poor disposal practices, demolition and other anthropogenic processes have resulted in asbestos often being present in the ground, particularly on brownfield sites.

This project will provide contaminated land professionals with a comprehensive guide on how to fulfil a duty of care and assess and mitigate against the risks associated with asbestos found on contaminated sites.



**We believe that big challenges
are best tackled collaboratively...**

**...and this year we've
collaborated extensively**

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Downloads

Over 45,000 professionals have downloaded our research reports.



Delegates

We've hosted in excess of 2,500 event delegates.



Visitors

We've had more than 200,000 unique visitors to our websites, serving up over 1,000,000 page views.



Professionals

We've worked with over 900 industry professionals involved in our research panels and projects.



Members

We've engaged with 275 member organisations spanning clients, consultants, contractors, Local Authorities and Government departments.

To get involved visit www.ciria.org



CIRIA is the construction industry research and information association. It is an independent, not-for-profit, member-based research organisation that exists to champion performance improvement in construction.

Since 1960 CIRIA has delivered support and guidance to the construction, built environment and infrastructure sectors. CIRIA works with members from all parts of the supply chain to co-ordinate collaborative projects, industry networks and events. High quality guidance is delivered to industry through a range of performance improvement activities.

For more information on CIRIA's products and services please visit www.ciria.org

