



Forth Bridges Forum Public Meeting

20/1/26

FORTH BRIDGES
FORUM



Welcome

John Andrew, Project Manager,
Forth Bridges Forum, Transport Scotland

FORTH BRIDGES
FORUM

Agenda

- Welcome from the Forth Bridges Forum
- Forth Bridges Operational Updates
- Forth Bridge World Heritage Site Draft Management Plan
- Questions & Answers
- Any Other Business

Welcome

- What's the Forth Bridges Forum
- Membership
- Aims of the Forum
- Forum subgroups
 - Tourism Group
 - Forth Bridge World Heritage Site Management Group
- Maintains website and social media channels

The background features a stylized, abstract graphic of the Forth Road Bridge and the Queensferry Crossing. The bridge structures are depicted in light grey and white lines against a dark teal background. The Forth Road Bridge is on the left, and the Queensferry Crossing is on the right. The text is centered over the bridge structures.

Forth Road Bridge & Queensferry Crossing Operational Update

Nick Forbes, Queensferry Crossing Manager, BEAR Scotland

Forth Bridges Forum January 2026



Queensferry Crossing (M90 0-1 60)



Forth Road Bridge (A9000 9)

BEAR Scotland - South East



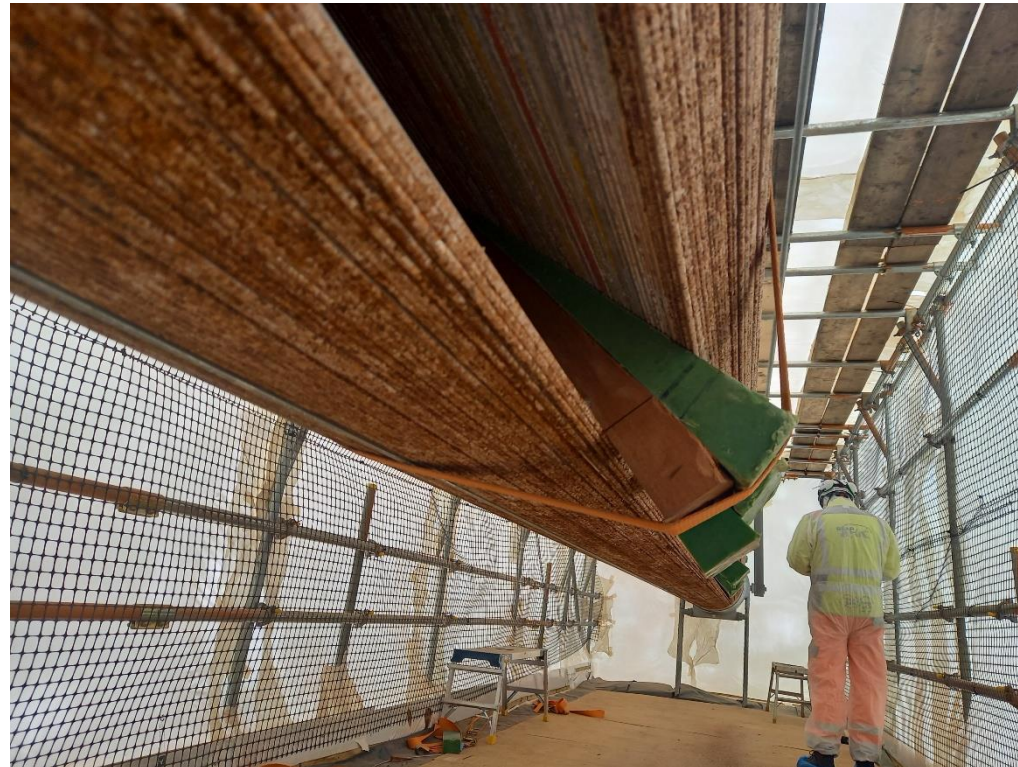
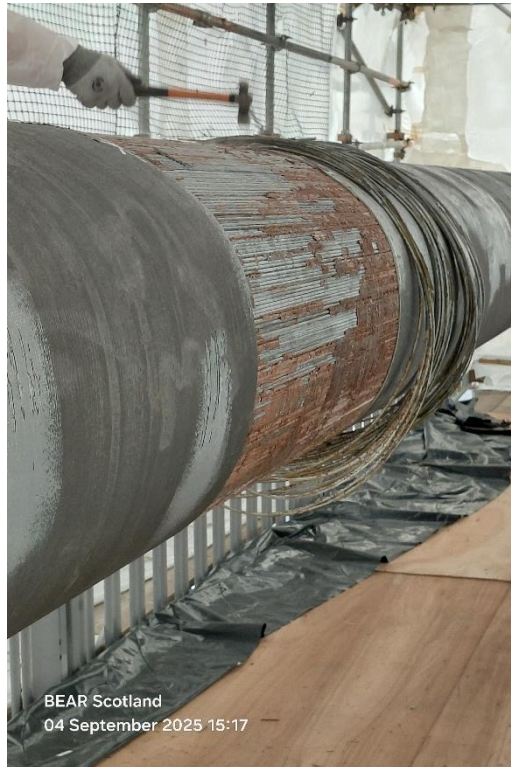
- On behalf of Transport Scotland, BEAR Scotland maintain and operate the Forth Road Bridge and Queensferry Crossing
- SE NMC – August 2020 - Covers over 314 miles of trunk road motorway
- Includes 870 bridges and structures
- Includes Major Bridges crossing the Forth:
 - Queensferry Crossing
 - Forth Road Bridge
 - Kincardine Bridge
 - Clackmannanshire Bridge



FRB Main Cable Internal Inspection



FRB Main Cable Internal Inspection



FRB Main Cable Internal Inspection



- Dehumidification system is very effective in reducing cable deterioration
- No deterioration identified in panels reinspected in 2004, 2008, 2018 and 2025.
- Laboratory testing due for completion Spring 2026, assessment results late spring 2026.
- Current data positive and with correct maintenance investment Forth Road Bridge main cables expected fulfil its design life of at least 120 years.

2024 – Dehumidification Upgrade

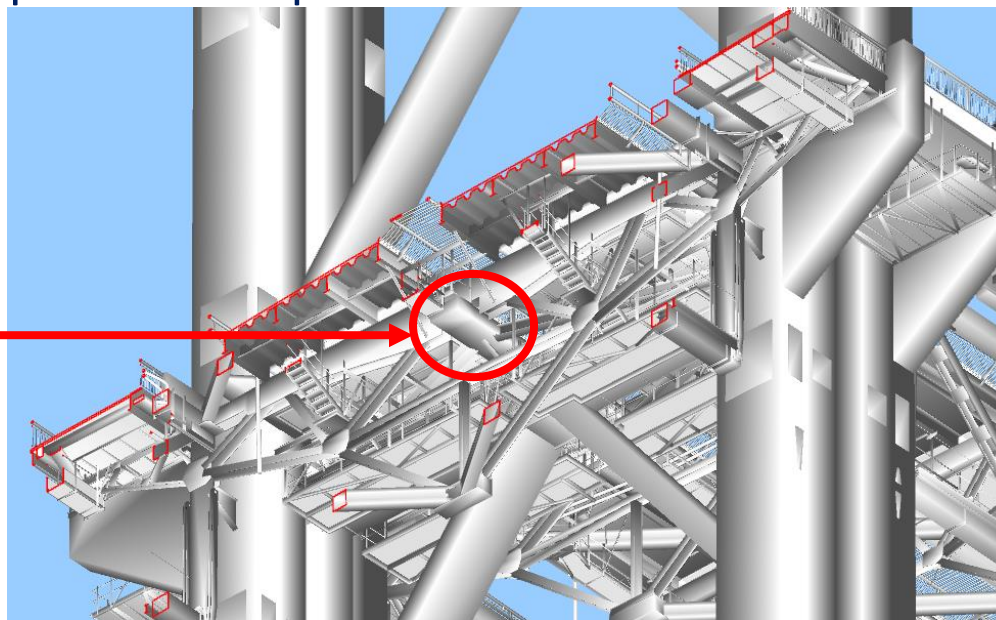
- First dehumidification system installed on an existing main cable of a suspension bridge in the world.
- Upgrade and refurbishment completed in 2025 for an additional 15 years design life.



FRB Lateral Thrust Bearing Replacement

- Original Main Tower lateral Thrust Bearing currently being replaced.
- ~£3m worth of works to carry out steelwork strengthening bearing replacement, blasting and painting, permanent access construction.
- Works due for completion in September 2026

Main Tower Later
thrust (horizontal
wind bearing)



Forth Road Bridge

- Original Viaduct lead painting works blasted and painted within internal box girders.
- Scheme due for completion April 2026



Reinstall of primed downpipes commenced



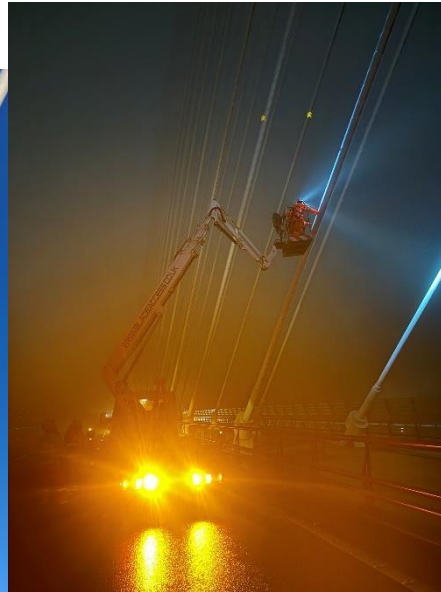
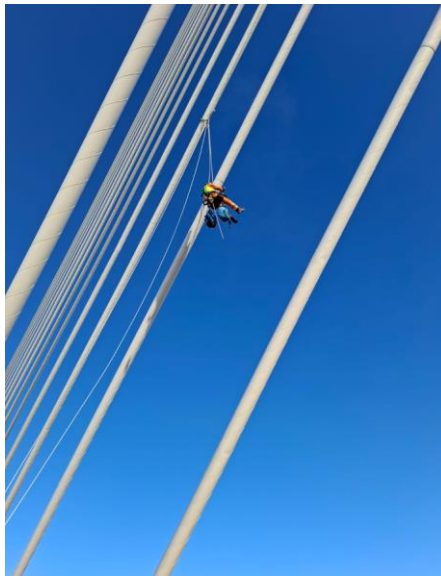
SE box girder primed



SW box post blast

Queensferry Crossing

- Regular inspection works and cyclic maintenance works ongoing.
- Stay inspection and some repair works from wind blown debris completed in October 2025.



Queensferry Crossing

SPIE VEVA Automated Barrier

- Scheme complete to deploy automated barrier to transfer traffic from QC to FRB in the event of an incident.
- On going maintenance works complete



Queensferry Crossing

Architectural Lighting Upgrade

- Upgrade of Architectural Lighting Complete
- Energy and cost savings around 80% to 90% to be realised





Forth Bridge Operational Update

Kenny McAlpine, Regional Asset Manager (Structures),
Network Rail



Forth Bridge: current status

Kenny McAlpine

KEY UPDATES

OFFICIAL



- Engagement with the ORR
- Management programme
- Fife Electrification
- Forth Bridge Experience

The background features a stylized, abstract representation of the Forth Bridge in shades of red and grey. The bridge's iconic cantilever structure is depicted with bold, geometric shapes, creating a modern and graphic look.

Introduction to Forth Bridge World Heritage Site Draft Management Plan

Mark Watson, Historic Environment Scotland

The Forth Bridge World Heritage Management Plan revisited

Mark Watson

Historic Environment Scotland



UNESCO first met, November 1945, before the UN did, January 1946 and was dedicated to “building peace in the minds of men”



UNESCO was founded in 1945: first meeting at the Institution of Civil engineers in London, addressed by Clement Attlee
1972 World Heritage Convention



United Nations
Educational, Scientific and
Cultural Organization



The Forth Bridge
inscribed on the World
Heritage List in 2015

OUV of The Forth Bridge

Justification of Outstanding Universal Value

- Comparative study
- Integrity
- Authenticity
- Management





ICOMOS assessment, 2014: Prof Michel Cotte with Ian Heigh and Tara Busche. Listing in Bonn 2015



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The Forth Bridge
inscribed on the World
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10 years ago at the World Heritage Committee, below, ICOMOS runs through its assessment of the nomination at the World Heritage Committee in 2015. Some queries about protection and management. Criterion (ii) fails but the rest is OK.

Valeur universelle
exceptionnelle

- ✓ Intégrité
- ✓ Authenticité
- ✓ Analyse comparative
- ✓ Critères (i) et (iv)
- ✗ Critère (ii)

Conservation, protection
et gestion

- ✓ Délimitations
- ≈ ✓ Protection
- ✓ Conservation
- ≈ ✓ Gestion



Right:
The Forth Bridge in 1978
(SIHS Eric Watt photo
collection)



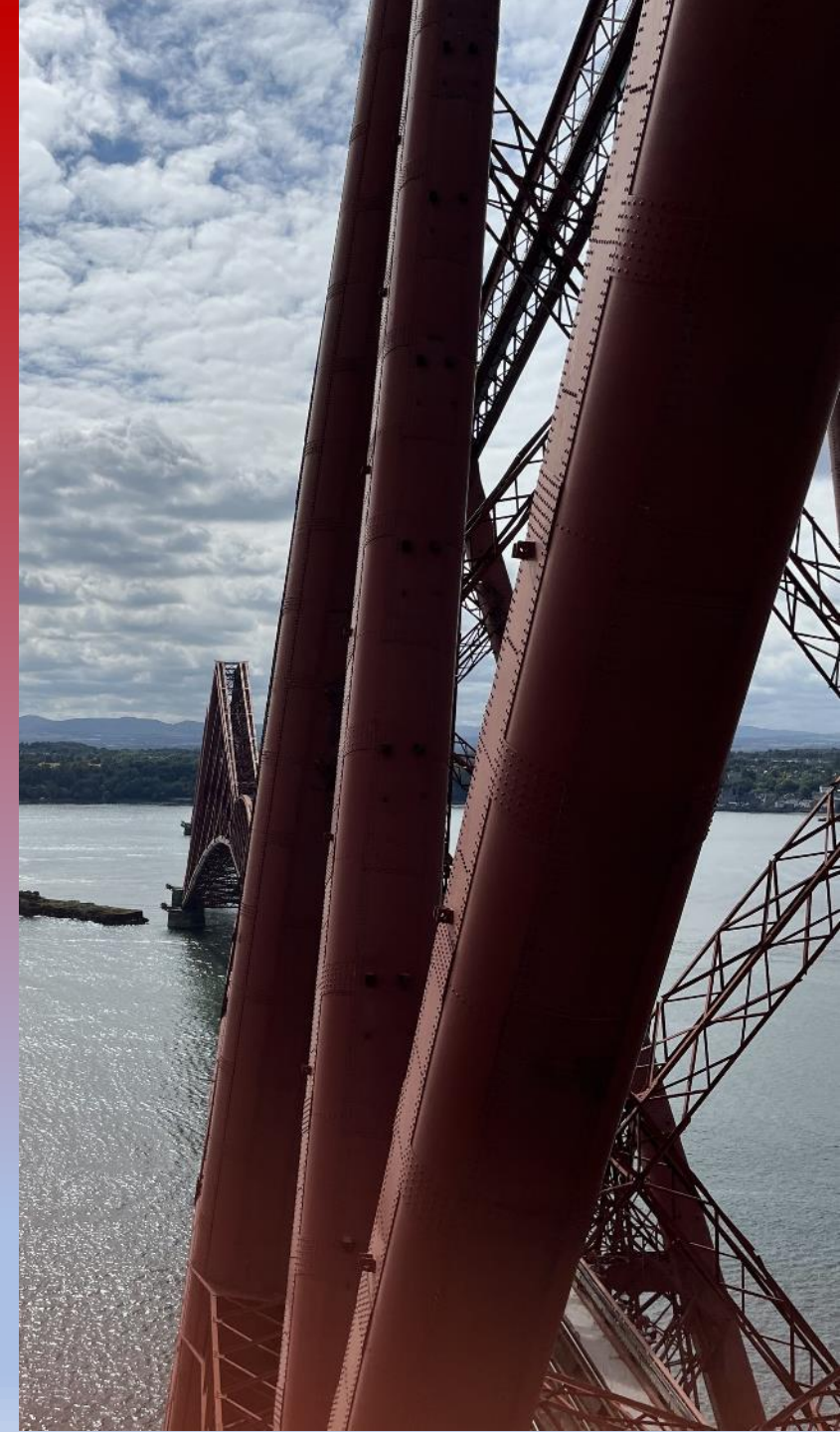
HISTORIC
ENVIRONMENT
SCOTLAND

ÀRAINNEACHD
EACHDRAIDHEIL
ALBA

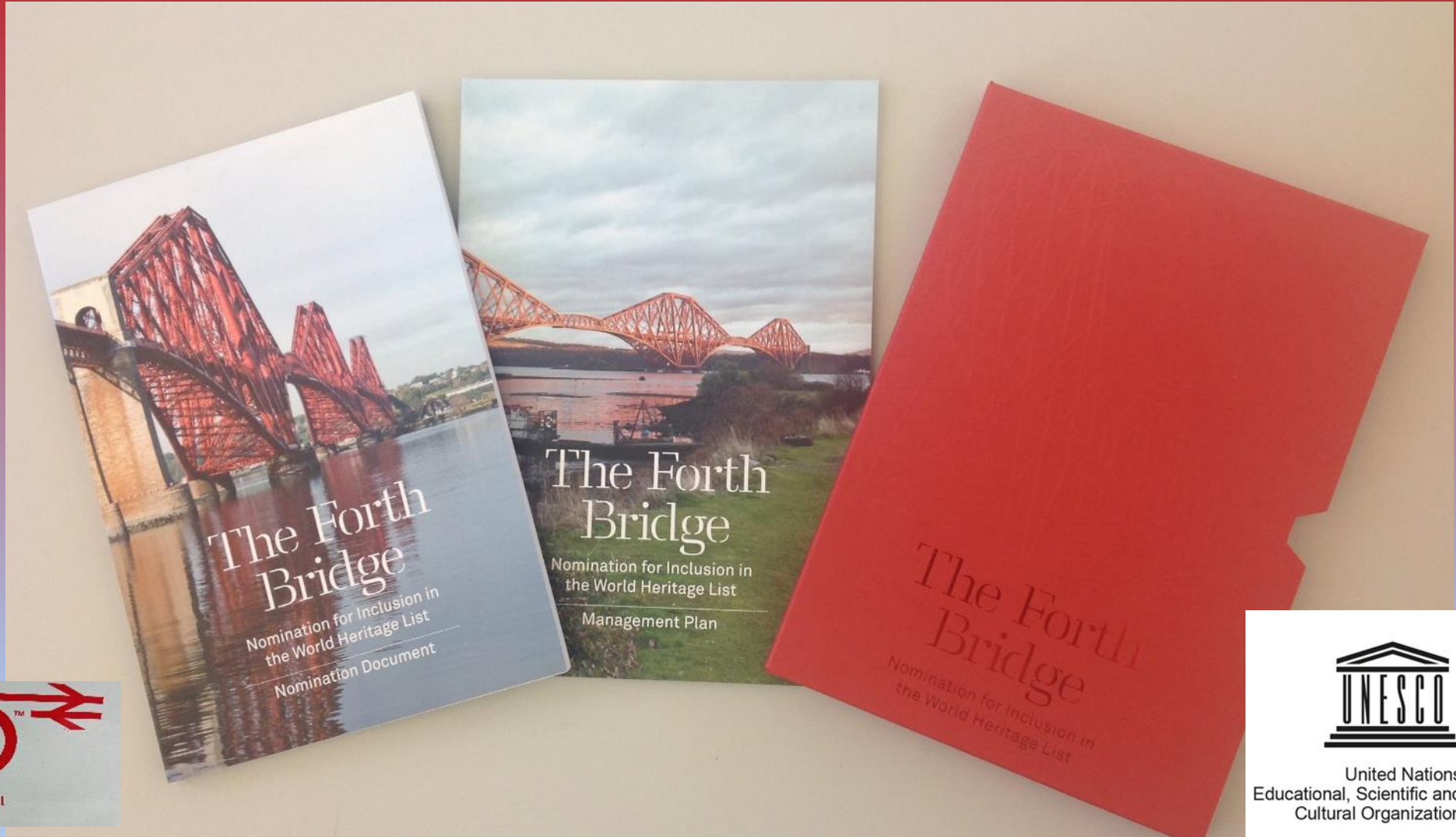
UNESCO criteria- at least one must be met. We have two and official wording agreed by UNESCO.

Criterion (i): The Forth Bridge is a masterpiece of creative genius because of its distinctive industrial aesthetic, which is the result of a forthright, unadorned display of its massive, functional structural elements.

Criterion (iv): The Forth Bridge is an extraordinary and impressive milestone in the evolution of bridge design and construction during the period when railways came to dominate long-distance land travel, innovative in its concept, its use of mild steel, and its enormous scale



Submitted in 2013, preceded and followed by local consultation, nomination and a management plan



UNESCO asked for fewer attributes in its six-yearly periodic report submitted in 2023.

	Brief identification of attribute
3.2.1	Form -strength, grace
3.2.2	Function -connecting people
3.2.3	Fabric -materiality
3.2.4	Symbolism - gateway. links
3.2.5	Coating -red; a never ending task
3.2.6	Kinetic experience to travellers on the move at sea, in the air and over bridges
3.2.7	Scale, contrasted with piers, houses, bothies
3.2.8	Engineering achievement

Factors affecting the attributes of the property (Periodic report 2023)

4.3.5	Major linear utilities	(i) and (iv); attributes 2, 3 and 4	Monitoring	Monitored by those responsible for that item of infrastructure
Pollution				
4.4.1	Pollution of marine waters	(i) and (iv). Attributes 3 and 5	Any incidents caused by use or maintenance of the bridge is to be reported to Network Rail, whose contractors take care to avoid spills.	The condition of sea waters, and the Ramsar site for migratory birds below east and west of the property, is overseen and reported by the Forth Estuary Forum.
4.4.4	Air pollution	(i) and (iv). Attribute 5, coatings.	Monitor any deterioration in the paintwork.	Monitoring of the condition of the paint coating is done by abseil teams.
Local conditions affecting physical fabric				
4.7.4	Radiation/Light	(i) and (iv). Attribute 5, coatings.	The recoating of the whole bridge 12-23 years ago was in part prompted by the slow deterioration of paint surfaces in accessible locations on the bridge, particularly the top exposed to UV light.	Network Rail regularly uses specialist abseil teams to access these areas and monitor condition.
Climate change and severe weather events				
4.10.1	Storms	Criteria (i) and (iv). Attributes 1 and 2.	Monitor wind strength to determine whether the bridge need be closed to trains.	Transport Scotland/ Forth Bridges Forum monitors wind strength in particular at two road bridges which might close to high-sided vehicles before the same might be needed at

Periodic reporting computer says back to us:

5.3.17	<ul style="list-style-type: none">• In a limited manner, the management system of the World Heritage property does contribute to gender equality• The management system of the World Heritage property does not provide ecosystem services/benefits to the local community (e.g. fresh air, water, food, medicinal plants)• In a limited manner, the management system of the World Heritage property does contribute to social inclusion and equity, improving opportunities for all, irrespective of age, sex, disability• In a limited manner, the management system of the World Heritage property does integrate a human rights-based approach• In a limited manner, the management system of the World Heritage property does contribute to conflict prevention, including respect for cultural diversity within and around the World Heritage property
6.1	Funding
6.1.3	The available budget is acceptable but could be further improved to fully meet the management needs of the World Heritage property
6.1.10	No use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property
6.1.12	A site-based capacity building plan or programme is in place and partially implemented; some technical skills are being transferred to those managing the property locally, but most technical work is still done by external consultants
8	Education, Information and Awareness Building
8.2	There is a planned education and awareness programme for children and/or youth but it only partly meets the needs
9	Visitor Management
9.7	There is a strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are some deficiencies in implementation
9.12	The presentation and interpretation of the Outstanding Universal Value of the property is acceptable but improvements could be made
10	Monitoring
10.1	There is considerable monitoring at the World Heritage property but it is not directed towards management needs and/or improving understanding of Outstanding Universal Value

Stakeholders far and near.
Communities of Place and
of Interest. Over to you!

Baukustbuilding visit in 2024



North Queensferry 2014
Steampunks in 2017;
Greens in 2019





Process for updating the Management Plan

Karen Stewart, Forth Bridges World Heritage and Tourism Lead,
Fife Council



Forth Bridge World Heritage Site Draft Management Plan 2025-2035

Why

- UNESCO asks that World Heritage Sites maintain a current Management Plan
 - Previous Management Plan 2015
- The management plan ensures the long-term protection, conservation and promotion of the Forth Bridge as a UNESCO World Heritage Site
- Collaborative framework for coordinated action by the many organisations and stakeholders involved





Forth Bridge World Heritage Site Draft Management Plan 2025-2035

Who

- Working Group since January 2025
- Formed from stakeholders in the Forum
 - Historic Environment Scotland, Network Rail, Transport Scotland, VisitScotland, City of Edinburgh Council, Fife Council, with Planning input from West Lothian Council
 - Plus, advice from Old & New Towns Edinburgh World Heritage Site Coordinator
- Oversight from the Forth Bridges Forum and World Heritage Management Group



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Cultural Organization



The Forth Bridge
inscribed on the World
Heritage List in 2015



Forth Bridge World Heritage Site Draft Management Plan 2025-2035

How

- Review the Management Plan from 2015 and subsequent correspondence with UNESCO to identify sections to be re-used and updated
- Identify gaps in the contents required using Historic England guidance for all UK World Heritage Sites
- Submit pre-screening Strategic Environmental Assessment
- Pre-draft public engagement to gather views on content of plan and benchmark for future surveys
- Prepared draft Plan for stakeholder review and approval
- Launched public consultation on draft Plan



Forth Bridge World Heritage Site Draft Management Plan 2025-2035

Structure 1/3

- Introduction
 - The World Heritage Convention
 - The World Heritage Property
 - Protection and Management Requirements
 - Purpose and Status of Management Plan
 - Engagement in Management Plan
 - Related Plans
 - Lifespan and Review Schedule for the Management Plan





Forth Bridge World Heritage Site Draft Management Plan 2025-2035

Structure 2/3

- The Property Boundaries and Setting
- Significance and Outstanding Universal Value
 - Statement of OUV
 - Attributes and Values
 - Designated Assets
 - Legislative and Planning System
- Current Management
 - Ownership
 - Governance
 - Other Stakeholders





Forth Bridge World Heritage Site Draft Management Plan 2025-2035

Structure 3/3

- Analysis of factors affecting the Property
 - Climate
 - Maintenance and Preservation
 - Risk Preparedness
 - State of Conservation of Attributes
- Management Vision and Objectives
 - Vision
 - Pre-draft Engagement Feedback
 - Objectives
- Appendices
 - Action Plan 2025-2029, Maps, Terms of Reference, View-Cones Monitoring, Action Plan 2015 Review, Pre-draft Engagement, Abbreviations





Forth Bridge World Heritage Site Draft Management Plan 2025-2035

Action Plan 2015 Case Studies (Appendix E)





Forth Bridge World Heritage Site Draft Management Plan 2025-2035

Pre-draft Engagement

- Appendix F
- Online questionnaire June 2025 with 29 questions
- 139 responses (10 questions about respondents)
 - 39% live in North/South Queensferry
 - 36% 65+, 43% were 45-64, 21% were aged 44 or under
 - 55% use the train occasionally, mainly for leisure (78%)
 - 56% attended an anniversary or charity event
 - Interested in Scottish history, engineering, industrial heritage (top 3)
 - 80% had used one of the walking or cycling routes
 - Top 3 sources of further information: internet, book, museum





Forth Bridge World Heritage Site Draft Management Plan 2025-2035

Pre-draft Engagement

Outstanding Universal Value (OUV) related questions (9)

- 82% well looked after transport structure (8% no opinion)
- 92% no comments/concerns on safety about crossing by train (4% yes)
- 84% no comments/concerns on safety in surrounding area
- 76% no comments/concerns about conservation
- 76% no comments/concerns about appearance
- 83% no comments/concerns on climate change impact
- 75% no comments/concerns on access to the area around the Forth Bridge
- 79% no comments/concerns regarding views of the Forth Bridge
- 67% no comments/concerns on development near Forth Bridge






Forth Bridge World Heritage Site Draft Management Plan 2025-2035

Pre-draft Engagement

- Train stations safety and access (2 questions)
- Tourism interpretation material and visitor experience (2 questions)
- Education programme awareness and participation (2 questions)
- General (3 questions)
 - Impact of World Heritage Site Status
 - Main areas of focus for the Management Plan
 - Anything else to add



The background of the slide features an abstract geometric pattern. It consists of various angular shapes, including triangles and polygons, in shades of dark red and grey. The shapes are layered and overlap, creating a sense of depth and movement. The overall color palette is muted, with the red providing a strong contrast against the grey.

Protection through the Planning system

Adam Thomson, Senior Heritage Conservation Planning Officer,
City of Edinburgh Council

Forth Bridge World Heritage Site



The Forth Bridge was inscribed as a World Heritage Site by UNESCO in July 2015. The world's first major steel edifice remains a potent symbol of Britain's industrial, scientific, architectural and transport heritage and, in particular, Scotland's engineering pedigree and ingenuity.



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The Forth Bridge
inscribed on the World
Heritage List in 2015

Category A (LB40370) & Category A Group

- Formal recognition of a structure's of *special architectural or historic interest*

- Buildings are listed by Historic Environment Scotland

In deciding to list, Ministers can consider group value and the desirability of preserving any features within the curtilage of the building of special interest



Conservation
Areas



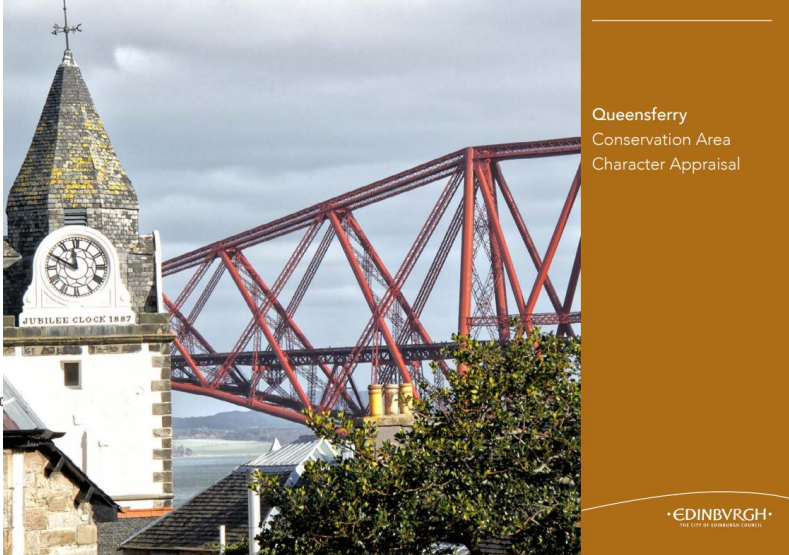
Conservation Area Character Appraisals



NORTH QUEENSFERRY CONSERVATION AREA
APPRAISAL
and
CONSERVATION AREA MANAGEMENT PLAN



DRAFT OCT 20



Legislative background



Planning (Listed Buildings and Conservation Areas)(Scotland) Act 1997 (The Heritage Act)

Historic Environment Scotland Act 2014

Planning (Listed Building Consent and Conservation Area Consent Procedure)(Scotland) Regulations 2015

Historic Environment Circular 1.

Town and Country Planning (Scotland) Act 1997

The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013
Historic Environment Circular 1

Statutory Tests

Listed Building Test

- S14, S59 and S64 of Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 (the "1997 Heritage Act")
- HES's Managing Change guidance and HES Policy statement takes precedence and should be referenced in the planning authority's report of handling of an application for listed building consent.
- In determining applications for listed building consent, the Local Development Plan is not a statutory test. However, the policies of LDPs inform the assessment of the proposals and are a material consideration.

Processing applications affecting a listed building

- Advertisement
- Site notice
- Consultation with HES on A listed buildings
- HES objection – notification to Scottish Ministers
- HES comments are a material consideration

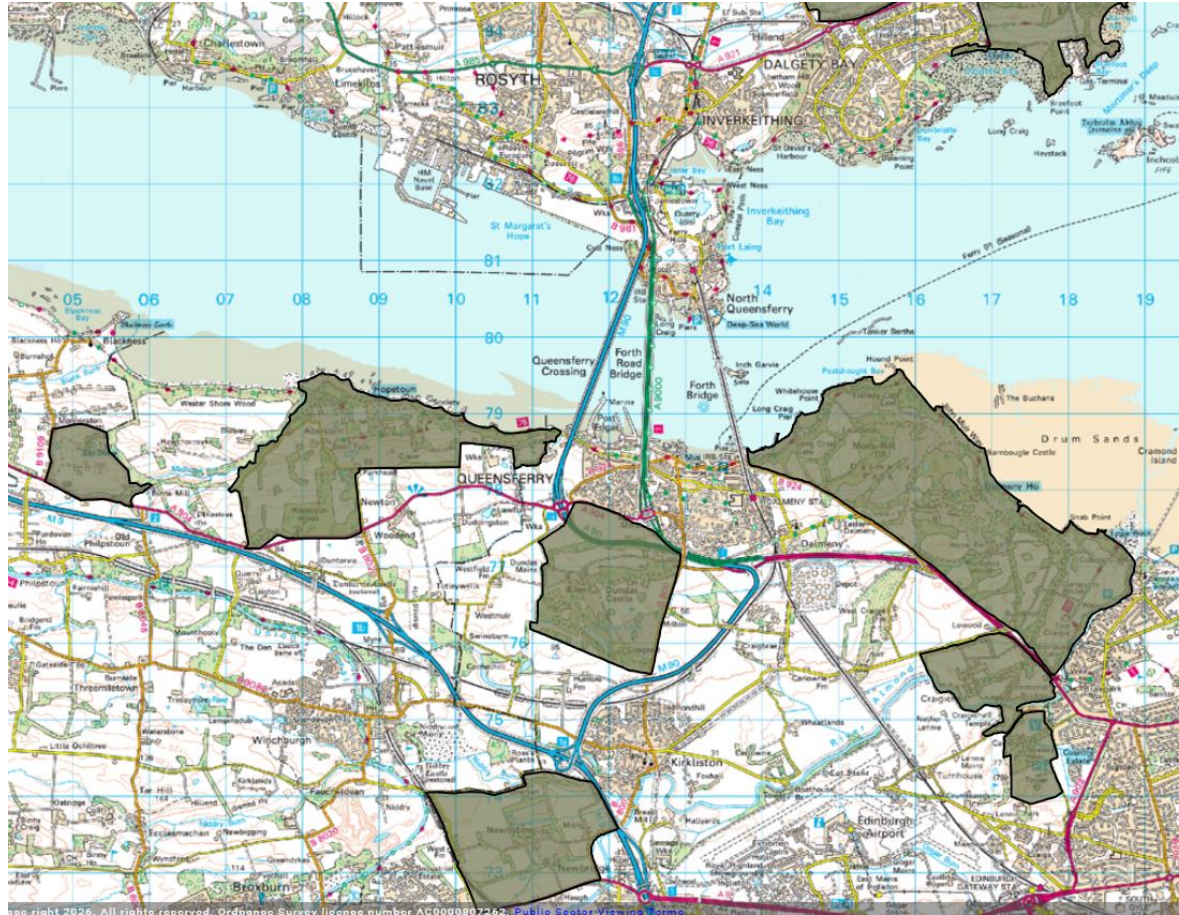
Scheduled Monuments

Fife: The Chapel of St James, patron saint of Travellers/Pilgrims, an essential place of worship for all ferry travellers in the Middle Ages.

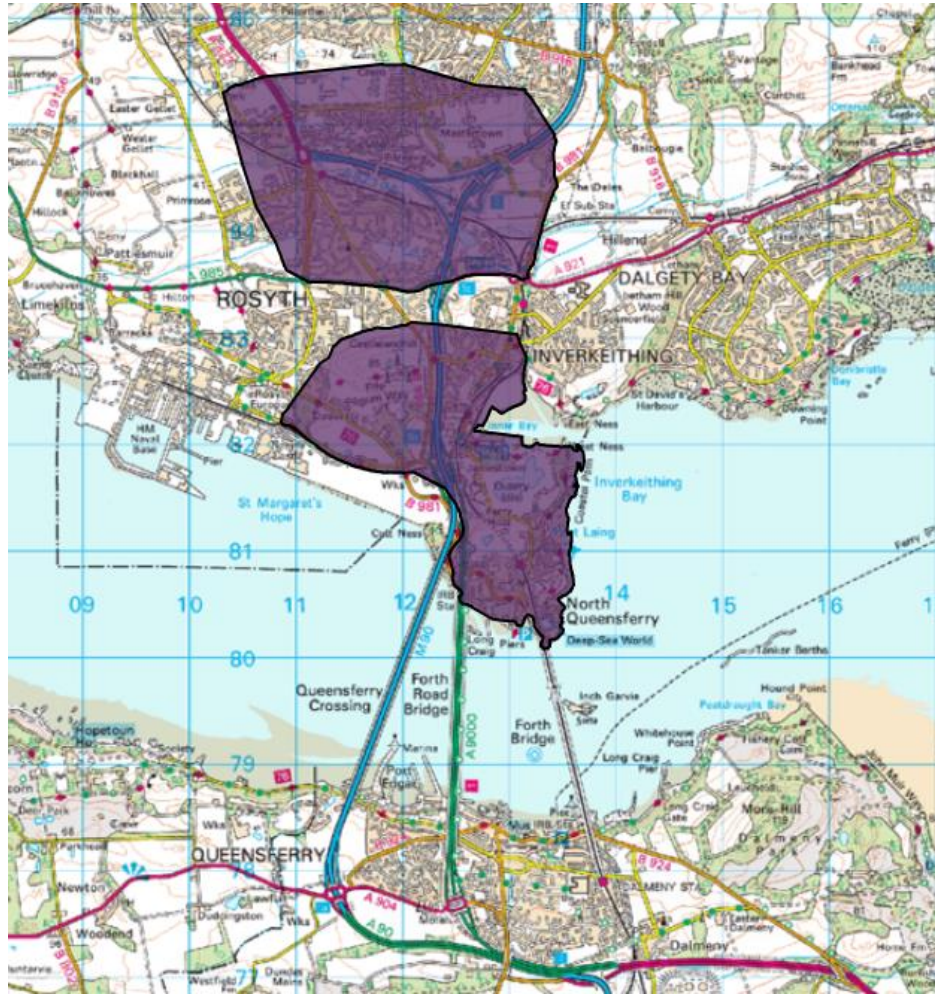
City of Edinburgh: the Island of Inchgarvie



Inventory Historic Gardens and Designed Landscapes



Inventory of Historic Battlefields Scotland



Natural Heritage Designations

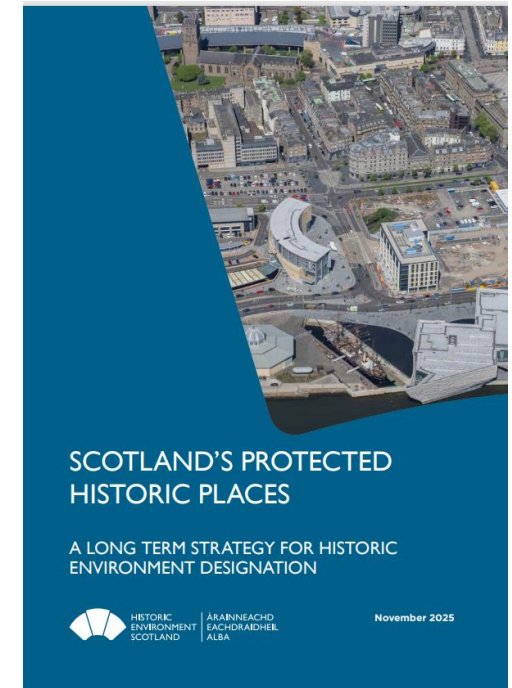
- Firth of Forth Special Protection Area (SPA)
- Firth of Forth Ramsar (Wetland) Site
- Sites of Special Scientific Interest (SSSI)
- Firth of Forth SSSI
- Long Craig Island SSSI
- Carlingnose Quarry SSSI

Policy Background

Historic Environment Policy for Scotland (HEPS) (2019)

Our Past, Our Future - The Historic Environment Strategy for Scotland (2023)

Scotland's Protected Historic Places

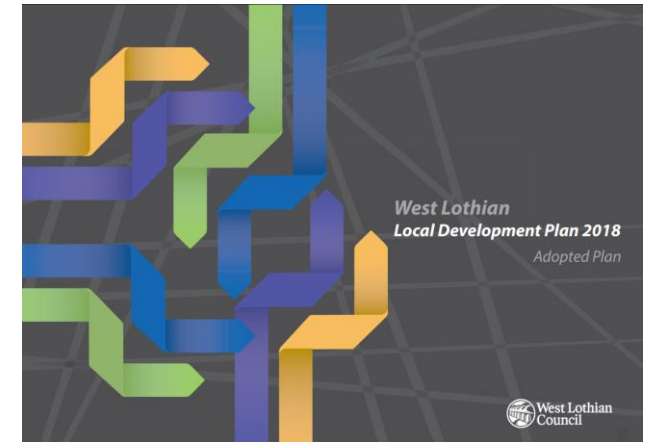


Local Development Plans:



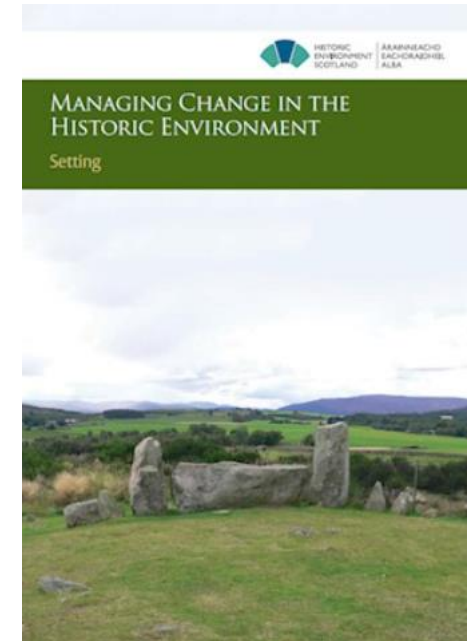
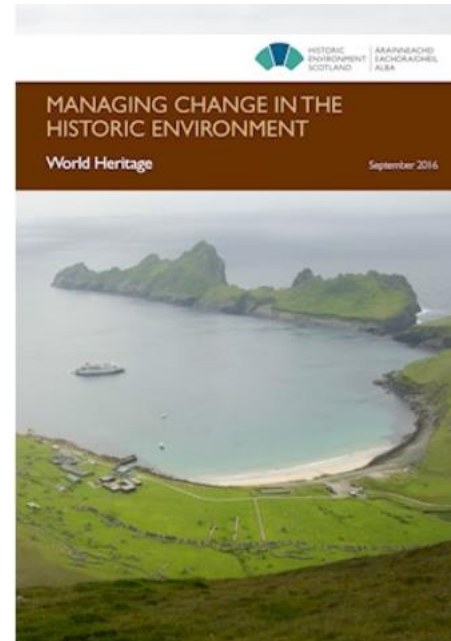
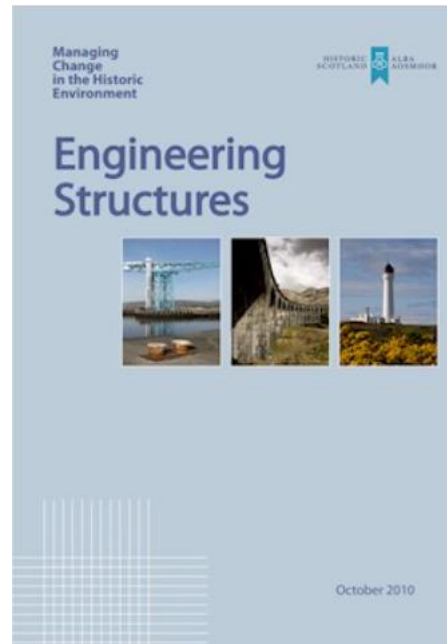
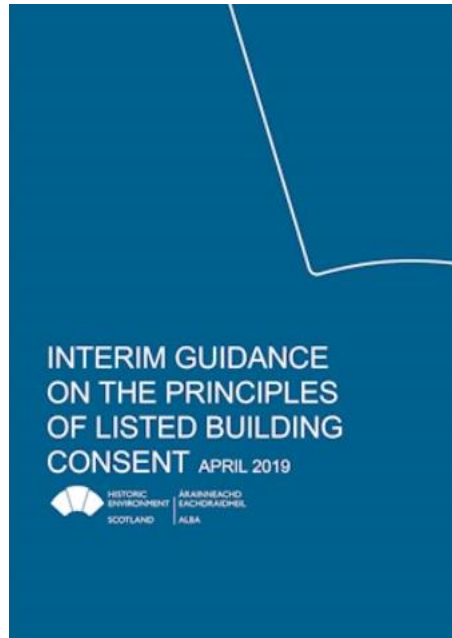
FIFEplan - Adopted Plan
Written Statement

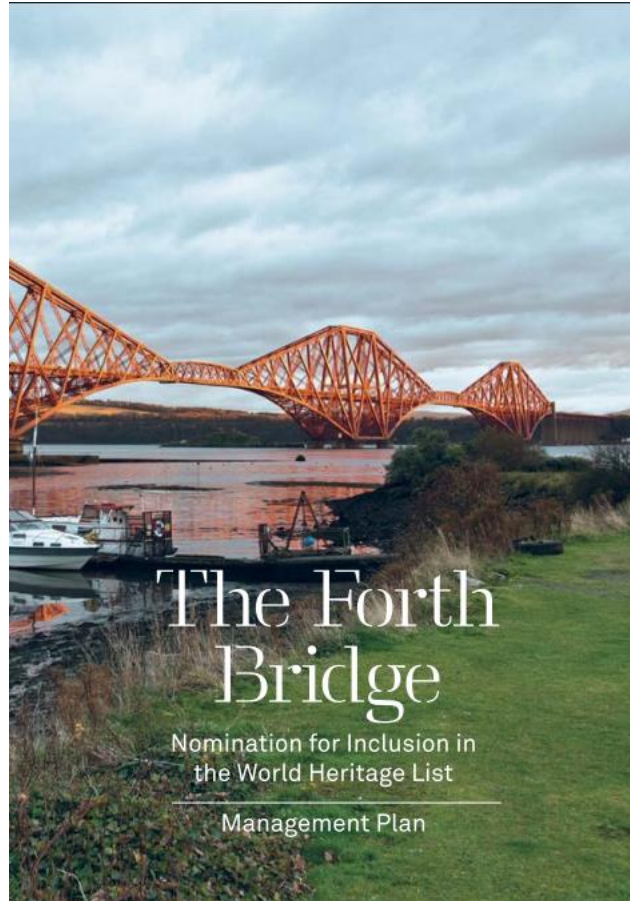
FIFEplan 
PEOPLE | ECONOMY | PLACE



Historic Environment Scotland Guidance

Managing Change in the Historic Environment:





THE FORTH BRIDGE
WORLD HERITAGE SITE
MANAGEMENT PLAN 2025-2035
DRAFT 22/10/25



The Forth Bridge World Heritage Site: Key Viewpoints



Prepared for the Forth Bridge World Heritage Management Group on
behalf of the Forth Bridges Forum, October 2016



The ten protected view cones

1.	Ferryhills, North Queensferry, Fife
2.	B981 Above and below Balbougie Glen, Fife
3.	B9157 Clockluine Road, Fordell to Hillend, Fife
4.	Mons Hill, Dalmeny, City of Edinburgh
5.	Dalmeny Main Street near water tower, City of Edinburgh
6.	Station Road/ Bankhead Rd, Dalmeny, City of Edinburgh
7.	Forth Bridges Contact & Education Centre, Queensferry, City of Edinburgh
8.	Newton, West Lothian Council
9.	Viewing Tower at the House of the Binns, West Lothian Council
10.	Castland Hill, Fife



Title:
Forth Bridge Viewpoints

Key



Management and Risks

Kenny McAlpine, Regional Asset Manager (Structures),
Network Rail

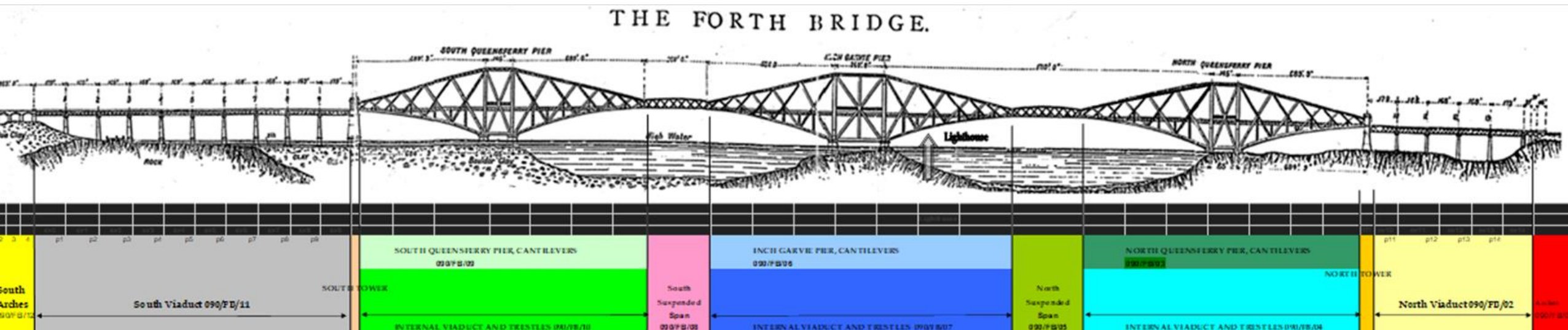
OWNERSHIP



- Network Rail is the custodian of the Forth Bridge and responsible for its ongoing day-to-day maintenance and management.
- We are a non-departmental public body - funded in Scotland by the Scottish Government through Transport Scotland.
- Our income is reinvested in the railway, to make our railways safer, better and greener.
- Partnership Management Agreement

Network Rail Management Strategy

- Bespoke Asset Management Plan – only applied to 3 individual major structures in Scotland: Forth Bridge, Tay Bridge and New Clyde Bridge at Glasgow Central.
- Funding through cyclical 5-year Control Period settlement in Network Rail's Delivery Plan.
- Continuous maintenance strategy between major refurbishment interventions (25-30 years). Contractor presence for emerging defects.
- Supplemented by Network Rail's ongoing routine examination contract (15 examinable areas).



MAINTENANCE AND PRESERVATION PLANS



- Funding provided in five-year Control Periods
 - CP5 to 2018/19 minor repairs
 - CP6 to 2023/24 way beam trough repairs, North Approach Viaduct refurbished, hoist replaced
 - CP7 to 2028/29 increased annual maintenance, wind fence and water management on North Approach viaduct
 - Beyond CP7 evaluating paint condition, Climate Adaptation Pathway, risk management, lighting solution



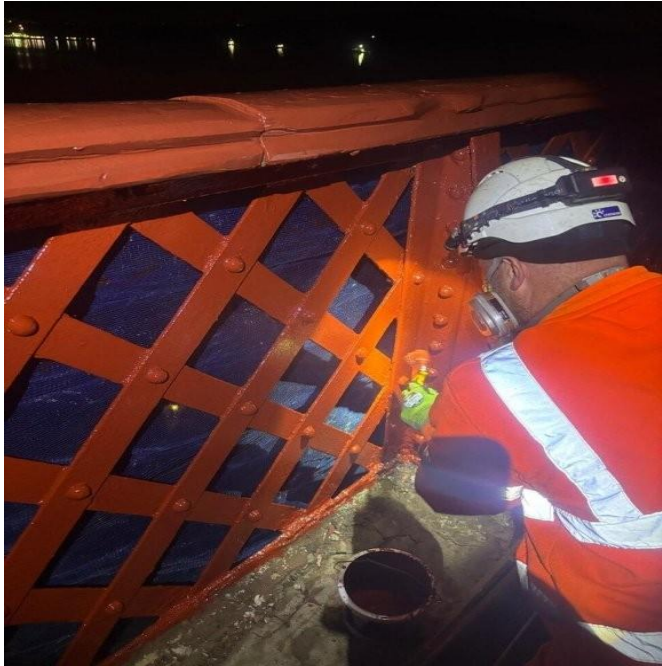
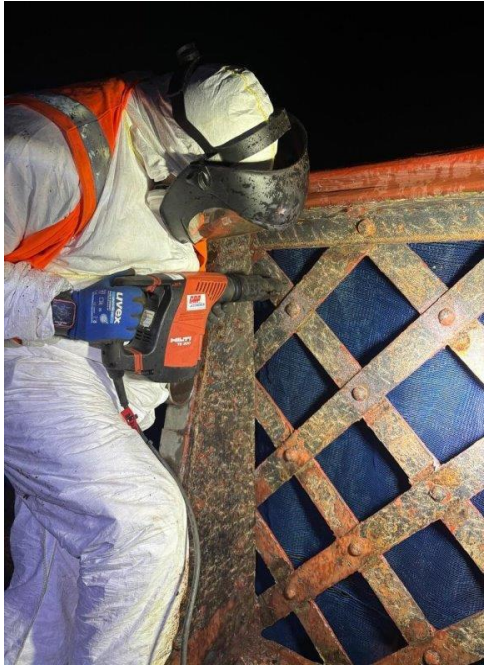
Span 15

Span 14

Span 13

Span 12

Span 11







FACTORS AFFECTING THE BRIDGE - CLIMATE



- Network Rail has built a weather and climate profile for the bridge, including temperature and rainfall
- Climate shift is warmer and wetter, with sea level rises
- Future projections: higher average temperatures, warmer and drier summers, milder and wetter winters, more heavy rainfall events, rising sea levels and reduced frost
- Climate impacts inspection and maintenance programme

RISK PREPAREDNESS



- Climate Change Impact
- Disaster Risk Management Plan
- Fire Risk
- Shipping Collision Risk
 - Following the Baltimore bridge collision in 2024, Forth Ports reduced speed limit for commercial vessels from 12 to 8 knots and mandatory tug escort for vessels over 180m



Action Plan, Consultation and Next Steps

Karen Stewart, Forth Bridges World Heritage and Tourism Lead,
Fife Council



Action Plan 2025-2029

- Appendix A
- Timing in line with Network Rail financial control periods
 - Next Action Plan will be 2029/30 - 2033/34
- 7 themes carried forward from 2015 Plan
 - Identification, Protection, Conservation, Presentation & Tourism, Communities, Future Generations, Management & Governance
- 34 Actions
 - Actions informed by Pre-Draft Engagement from June 2025
 - Responsibility and Timing identified
 - Action Plan status on agenda for Forth Bridge World Heritage Management Group and annual overview for Forth Bridges Forum





Ongoing Actions Examples

- Annual renewal of Partnership Management Agreement
- Monitoring potential development in the key view-cones
- Maintain the Disaster Risk Management Plans
- Monitor condition of the Forth Bridge
- Promote public transport and active travel
- Utilise 3D model of the Forth Bridge(s)
- Anniversary and charity events
- Further use of UNESCO Trail and other cultural routes
- Maintain website and social media calendar
- Maintain dialogue with Communities on bridge works
- Maintain School Education Programme





New Actions Examples

- Complete Climate Vulnerability Assessment by 2029
- Explore future architectural lighting solution in Control Period 8 (29/30-33/34)
- Guidance of vegetation maintenance at viewpoints 2026
- Maintenance arrangements for key pathways and viewpoints 2026
- Develop plan and funding for Forth Bridge Experience in CP7 (24/25-28/29)
- Re-form Collections Sub-Group and develop a Research Policy 2026
- Refresh Terms of Reference for Forum subgroups in 2026





Consultation on the Draft Plan

- Launched 10th December 2025 with press release, social media, stakeholder notifications
- Concludes 31st March 2026
- Online consultation via QR code
- 6 local drop-in sessions January 2026
 - Hard copy Plan for reference and consultation questions available
- Review requirement for any further drop-in sessions

www.fife.gov.uk/forthbridge





Drop-In Session Questions

- Forth Bridge Experience Status
- Parking for Forth Bridge Experience
- Museums
- Lighting on the Forth Bridge
- Issues living under the Forth Bridge
- Jacob's Ladder condition
- Picnic area maintenance
- Community use of the Contact & Education Centre
- More use of the Forth Road Bridge



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The Forth Bridge
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Next Steps for the Management Plan

- Progress immediate actions in the Action Plan – from now
 - Update draft plan after consultation – from April
 - Prepare final plan for stakeholder approval
 - Graphic Design of plan
 - Final sign off
-
- Historic Environment Scotland
 - Scottish Government
 - Historic England
 - UK Government Department of Digital, Culture, Media and Sport (DCMS)
 - UNESCO





Questions & Answers

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Any Other Business

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Thank You

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