

**CLYDE BRIDGES HERITAGE TRAIL
OFFICIAL OPENING
26 MAY 1999**

Ladies & Gentlemen

I am delighted to be here as Chairman of ICE Glasgow & West of Scotland Association to participate in the launch of The Clyde Bridges Heritage Trail.

This is **one of a whole series of events** conceived by the Institution of Civil Engineers, and included in the original Glasgow '99 programme proposals a few years ago. I'm glad to say that all of the ICE events put forward at that time have either taken place over the last few years or will take place this year 1999.

It is often said that Glasgow made the Clyde and the Clyde made Glasgow.

Glasgow made the Clyde in the sense that its civil engineers dredged the shallow salmon river and designed and built the harbours, docks and bridges that were so important to the industry and commerce, which made Glasgow the 2nd City of the Empire.

The docks and harbours have largely gone and so too has The Bishops Bridge, which stood at the foot of **Stockwell Street** for 500 years and the slightly earlier timber bridge dating from 1285.

Those who follow the heritage trail will find **18 bridges** to delight and interest them.

The earliest is the **South Portland Street** Suspension Bridge which dates from 1853, although it has had extensive repairs and replacements over the years.

The oldest complete bridge is the **Victoria Bridge**, dating from **1854**, which stands appropriately, on the site of the Bishops Bridge.

Behind us we have the **Kingston Bridge**, opened in 1970 and perhaps the busiest river crossing in Europe; and here beside us is the cable stayed and very elegant **Bells Bridge** built for The Glasgow Garden Festival in 1988 and capable of swinging open to permit the passage of ships.

Here you will find **bridges of all types** and in all materials, some beautiful, some less so, some old, some modern, but all fundamentally important to the city of Glasgow and the Clyde.

This very interesting heritage trail and the excellent brochure that comes with it provide an important and long lasting contribution to Glasgow's year as City of Architecture and Design.

Bridges no less than buildings are fundamental to our heritage of design.

The Heritage Trail leaflet is published by The ICE with the support of Glasgow City Council and Scottish Office.

Glasgow City Council has also marked and signposted the trail.

The leaflet was researched and written by the Babbie Group.

A special word of thanks is due to Gordon Masterton who carried out the research and to Dr Andrew Mair who organised the design and publication.

Before proceeding with the official opening I must draw your attention to the **efforts of the children** from Hillhead Primary School who are here to erect a large **model cable stayed bridge** with some guidance from the Graduates & Students of the Association.

This is **one of a number of model bridges** which have been designed and constructed with assistance and financial support from ICE; IStructE; Glasgow '99; Glasgow, Strathclyde, Paisley & Caledonian Universities; Stow College; Glasgow City Council and a number of eminent bridge designers.

These **models will be used to educate** and interest primary school pupils in the basics of bridge design and construction. You may see schoolchildren having fun building these bridges at various events around Glasgow during 1999 and beyond, but the **main event** will take place as part of the **RIAS Conference "From the City to the Spoon"** here at the Conference Centre on 27 & 28 May.

The models are designed to provide **a long lasting learning resource** which will be made freely available throughout Glasgow and further afield for educational purposes.

Now, if I can have the **assistance of two schoolchildren.**

On behalf of the Institution of Civil Engineers and everyone involved,

I have much pleasure in declaring the Clyde Bridges Heritage Trail open.

James P McCafferty
Chairman
Glasgow & West of Scotland Association
26 May 1999

Engineering in the time of cholera

THE CIVIL engineering of Sir Joseph Bazalgette, which put a stop to widespread outbreaks of cholera in Victorian London, is celebrated in a new book.

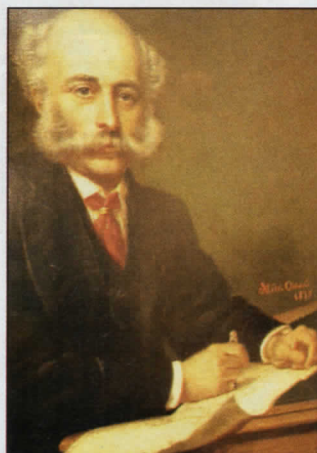
The great stink of London by Stephen Halliday records the work of Bazalgette – ICE President in 1883 – to improve sanitation in the capital after 10,000 people died of cholera in the long hot summer of 1858.

Sewage generated by two-and-a-half million Londoners was dumped in the streets and found its way into the Thames before 1860. The book starts with a stomach churning account of conditions in a passage which

crime writer Ruth Rendell – reviewing the book in *The Times* – recommends as “not to be read at meal times or when feeling queasy”.

Filthy drinking water which caused disease and foul odours from the river was so bad that the Government of the day considered upping sticks, although it settled in the end with soaking the curtains of the Palace of Westminster in chloride of lime.

Among Bazalgette's solutions were the river embankments which remain in use today. The Victoria Embankment between Westminster Bridge and Blackfriars was designed to accommo-



Sir Joseph Bazalgette.

date the low-level sewer he built to the north of the Thames. The Fleet, which had been a filthy conduit of sewage, became a river again and still flows under London's streets. Fish returned to parts of the Thames.

Bazalgette's embankments reclaimed 52 acres from the river which became roads, walkways and parks.

“I get most credit for the Thames embankment but it wasn't anything like such a job as the drainage,” Bazalgette said at the time.

The great stink of London by Stephen Halliday is published by Sutton, priced at £19.99.

Historical tour of Glasgow bridges

GLASGOW AND West of Scotland Chairman Jim McCafferty and pupils from Hillhead Primary School helped launch Clyde Bridges Heritage Trail, which guides tourists on a tour of Glasgow's historic bridges.

The ICE sponsored project has created a trail for tourists which follows the Clyde from Dalmarnock Bridge in the East End to Bell's Bridge beside the Scottish Exhibition and Conference Centre. A leaflet containing the history and photos of 18 bridges will be handed out as a route guide. Maps of the route have also been put up beside each bridge.

The project forms part of the city's 1999 UK City of Architecture and Design celebrations.



Glasgow and West of Scotland chairman Jim McCafferty at the launch of Glasgow's historic bridge trail.

Obituary: Major Reginald West Grigson

Major Reginald West Grigson whose engineering solutions contributed to the allies' successful D-Day landings in World War II, died last month aged 91.

Grigson was county surveyor of Leicestershire for 25 years and a Fellow of the ICE who had served on Council.

Born the son of a civil engineer in 1908, Grigson spent a nomadic youth while his father served as resident engineer at several coastal locations in Britain.

Grigson followed in his father's footsteps after gaining a BSc in civil

engineering at what is now Guildford University. He trained as a road engineer, working for no pay during the depression on construction of the Hampton Court Bridge and the Guildford Bypass. He was appointed assistant county surveyor, Gloucestershire, shortly before World War II.

Grigson joined the Territorial Army in 1936 as war drew closer in Europe, and was soon promoted to Captain. When war broke out in 1939 he was appointed to command Royal Engineers Unit 266 Field Company based at Reading, where he met his wife Katherine Kelly, a nurse.

Early in the war, Grigson's company was moved to Salisbury Plain with the task

of building a replica of the Siegfried Line to enable the RAF to calculate the best means of attacking the real thing. The task was abandoned in May 1940 when the German Blitzkrieg swept across Europe.

At the beginning of 1942 Grigson, by now a major, was posted to the War Office to design forward landing strips to enable the RAF to provide cover for allied ground forces. The final steel product took just days to lay out rather than months for a concrete landing strip.

In 1943, Grigson was instructing on making concrete beams for use in Bailey Bridges as there was a shortage of timber beams. In 1944 he worked on strengthening roads in the New Forest, in preparation

for allied troop movements to the south coast on their way to Normandy. D-Day troops also benefited from Grigson's contribution to the Mulberry Harbour project to create a floating harbour in the seas off Normandy for the disembarkation of men, machinery and supplies.

After D-Day Grigson was engaged in field expeditions to France to evaluate the success of his work. When demobbed in 1945 Grigson returned to his pre-war post at Gloucestershire County Council. He soon moved on to become county surveyor of Leicestershire where he was involved in many projects along the M1. After retirement in 1971, he worked voluntarily for the Council for the Protection of Rural England. He was awarded the OBE in 1970.

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