

ice | glasgow & west of scotland
125 years

ice
Institution of Civil Engineers

125 Years of ICE Glasgow & West of Scotland "Back to the Future"



with
Gordon Masterton Environment
Jim McCafferty Roads
Robert Binnie Water
Duncan Sooman Rail
Sam Thorburn Stadia

Thursday 15th October 2009
The Mitchell Theatre,
Charing Cross, Glasgow

125 Years of ICE Glasgow & West of Scotland: Back to the Future



Engineering The Nation's Infrastructure 125 Year Anniversary

"125 Years of Glasgow & West of Scotland - Back to the Future"

Foreword by David Anderson

Chairman of ICE Glasgow & West of Scotland Association, 2009 - 2010

It is a big year as we follow through on the Scottish members' decision to create an All Scotland Region in early November, when Glasgow and the West of Scotland becomes a Branch. A major highlight of this year was the civic reception held yesterday in Glasgow, which celebrated (to the day on the 14th October) the 150th Anniversary of the Loch Katrine water supply works.

This memorable event coincides with an equally memorable occasion tomorrow (to the day on the 16th October) - the 125th Anniversary of the formation of the Glasgow & West of Scotland Region, then the oldest ICE Region in the UK.

Constituted in 1884 as the Glasgow Association of Students of the Institution, ICE Glasgow & West of Scotland (G&WoS) was the first 'local association' of the Institution to be established outside London. In 1888, the membership was widened to include all grades of membership and effectively covered the whole of Scotland.

Over time, meetings were held outside Glasgow, firstly in Edinburgh which ultimately led in 1938 to the establishment of an independent 'Edinburgh Association', and later in Inverness, Argyll, and Dumfries & Galloway, which were all established as Branches of the parent ICE Glasgow & West of Scotland body. Throughout its long history, ICE G&WoS has held a well-earned reputation as being an active and well-respected focus for the profession in the area. In early November 2009, G&WoS will become the largest of the five constituted Branches under the newly formed ICE Scotland Region.

To mark this occasion, tonight's technical lecture "125 Years of Glasgow & West of Scotland - Back to the Future" sees a very welcome return of some well known faces of past Chairs and leading specialist figures. Tonight's speakers will reflect on some key aspects of 125 years in Water, Rail, Roads, Buildings & Structures and the Environment (Energy was covered in the Chairman's Address presented last month).

Welcome and thank you to our 125th Anniversary lecture speakers tonight; their career highlights are included in this Anniversary lecture booklet.

Gordon Masterton OBE

Gordon Masterton was born in Charlestown, Fife, close to the site of the Forth Bridges.

He joined Babbie Shaw and Morton in 1976 on graduating from Edinburgh University with first class honours in Civil Engineering. He then studied Concrete Structures at Imperial College, graduating MSc DIC in 1981. The next few years were spent designing bridges, mainly in Scotland, including the River Annan Bridge, the Nith Viaducts and many motorway structures.

In 1993 Gordon became a Director of Babbie Group Ltd and between 1995 and 1997 worked in the Far East establishing an office in Kuala Lumpur. On returning to the UK he headed up the Group's work in bridges and building structures, advising on a number of major PFI building projects.

In August 2004, Babbie Group became part of the Jacobs Group, and Gordon was appointed Vice President Environment with an expanded resource of 750 staff with revenues of £55m. By 2008 this had grown to 1400 staff and £100m.

Gordon is currently project representative for Crossrail.

In 2000 Gordon was Chairman of G&WoS region and in 2001 was elected Vice-President of the Institution of Civil Engineers and became President in November 2005, serving until November 2006, encompassing the bicentenary of the birth of Brunel.

Gordon is a Royal Commissioner on the Ancient and Historical Monuments of Scotland and the author of over 40 technical papers on buildings, bridges, tunnels and the history of civil engineering. He has appeared regularly on TV and radio, including the emmy-

nominated "Life After People" in 2008. In 2008 he was awarded an OBE for services to civil engineering in Scotland.

Gordon will talk about the huge contribution made by West of Scotland engineers to the quality of life that we enjoy today, and too often take for granted.



Jim McCafferty

Jim McCafferty is a Fellow of the Institution; he served on the G&WoS Association Committee 1993-2003, was Chairman 1998/99 and a Member of Council 2000-03.

He joined Scott Wilson in 1967 following graduation from Strathclyde, was a Partner/Director from 1987 and MD then Chairman of S W Scotland 1995-2007.

Jim's early experience was on Glasgow's motorways. He moved to Hong Kong in 1976 to work on new towns, roads and bridges, returning to Scotland in 1982 with responsibility for a wide range of projects at home and abroad.

He has presented papers on a wide range of subjects and many of his projects have won citations and awards.

In 1884, Glasgow was the 'Second City of the Empire' with paved streets and fine bridges over the Clyde. Outside the city, roads were basic. The 'Turnpike Era' was over; this was the 'Railway Era'. By 1905, bicycles and cars brought a boom in personal transport and realisation that the roads were a mess!



Some roads were built in the 1920s/30s, often to alleviate unemployment, and most had a bituminous surfacing by 1930.

By the 1960s, congestion in Glasgow had reached a crisis resulting in the

appointment of consultants who produced the seminal 'A Highway Plan for Glasgow' in 1963 including the Inner Ring Road and many other proposals. The M8 was built through the City but the box was not completed, resulting in today's congestion soon to be relieved by the M74 extension.

The 'Motorway Era' brought new roads to many parts of the Country. The construction phase may be nearing an end and some of the missing links are currently being constructed but the motorway between Glasgow and Edinburgh has yet to be completed!

Jim will cover the development of roads and motorways throughout the Region letting the images speak for themselves. It's a high-speed tour, so hold onto your seats!

Robert Binnie

Robert Binnie has been involved in the water sector for the whole of his working life, based in Glasgow. On graduating from Glasgow University he joined Crouch & Hogg to be trained under George Milne and Ian Bedgood. Although he has stayed with the same company, it became Crouch Hogg Waterman and then became Halcrow.

He became a Member of the Institution of Civil Engineers in 1981, has been Chairman of the Scottish Hydraulics Study Group and is Visiting Professor at Heriot Watt University.

He leads Halcrow's water business in the North of the UK. His interests cover the full water spectrum and he has been lucky enough to be involved in the creation of some of the more notable water projects in Scotland over the last 30 years - including the Loch Lomond Water Supply Scheme (with Balmore and Blairlinnans Water Treatment Works), Dalmuir Wastewater Treatment Works, Kelvin and White Cart Flood Prevention Schemes, River Clyde Flood Management Strategy and the River Nith Diversion.

Robert will present a brief review of how water projects have contributed to the landscape of the West of Scotland, Highlands and Islands over the past 125 years. This will include reservoirs, water and wastewater treatment works, pipelines, hydro-electric schemes, river management (including flood prevention schemes and diversions) and canals.



Duncan Sooman

Duncan Sooman is Network Rail Civil Engineer in Scotland where he is responsible for the safe and efficient asset management of all of the civils and buildings infrastructure. He is a career railway engineer who has trained and worked for the early part of his career for BR in Scotland before taking up senior positions in the East Midlands and London before returning to Railtrack in Scotland about 12 years ago.

Duncan's presentation will look at what was happening in railways in Scotland, and Glasgow and the west in particular, about 125 years ago, take a quick look at changes in the 20th century and where we are today and likely to go in the next 20 years.



Dr Sam Thorburn CBE

Dr Sam Thorburn CBE was chairman of the Glasgow and West of Scotland Association of the Institution of Civil Engineers for the session 1975-76.

Subsequently he represented the Association on many national committees of the Institution, including the then Executive Committee. He achieved the distinction of having been 50 years on the Roll of the Institution of Civil Engineers in 1999.

He was the first recipient of the Rear Admiral John Garth Watson Medal awarded by the Institution of Civil Engineers in 1993. It was given in recognition of his personal contribution to European Affairs on behalf of the Institution between 1982 and 1992.

He became a Fellow of the Royal Academy of Engineering in 1984.

He was elected President of the Institution of Structural Engineers in 1997 and was awarded the Gold Medal of that Institution in 2003.

His involvement with the conceptual design of the Ibrox stadium in 1977 led to his appointment to the Football

Licensing Authority formed in 1990 after Lord Justice Taylor's Report on the Hillsborough Disaster in 1989. He served on the Football Licensing Authority between 1993 and 2001.

He was chairman of the Working Party responsible for the fourth edition of the Guide to Safety at Sports Grounds (The Green Guide 1997).

Between 1999 and 2004, he was chairman of the Scottish Executive Building Standards Advisory Committee and was subsequently appointed first chairman of the new Scottish Registration Board for Approved Certifiers of Design (Building Structures) formed in 2004.

His presentation at the 125th Anniversary of the Association will cover his experiences of permanent and temporary sports ground structures with an emphasis on the influence of Glasgow and the West of Scotland engineers on design guidance.



2009- 2010 Programme of Lectures

Date and Time	Title	Speaker(s)
15 October 2009 @ 1815	125 Years of Glasgow & West of Scotland - "Back to the Future"	Gordon Masterton Jim McCafferty Robert Binnie Duncan Sooman Sam Thorburn
12 November 2009 @ 1815	Glasgow Airport Transfer Hub	Colin Crichton, BAA
03 December 2009 @ 1815	Tradeston Footbridge	Peter Lyttle, Halcrow Ian Steele, BAM Nuttall
09 December 2009 @ 1815	Katrine Water Project - "Victorian Legacy Enhanced by 21st Century Engineering"	Geoff Aitkenhead Scottish Water
14 January 2010 @ 1815	Delivering the M74 Completion Project	David Welsh, Interlink JV Steve McFadden, GCC
18 February 2010 @ 1815	Whitelee - delivering Europe's largest onshore windfarm	Simon Christian, SP Renewables Stuart Mason, SP Renewables
11 March 2010 @ 1815	Kilmarnock-Barrhead Rail Link	Brian Sydney, Network Rail
25 March 2010 @ 1815	Partick Rail Interchange	Charlie Hoskins, SPT Raj Sinha, CSC
22 April 2010 @ 1830	Joint Institutions Prestige Lecture - Bloodhound the 1000 mph challenge	Tony Parraman