

University archives reveal Queensferry Crossing design is historic

Forgotten pioneer's Forth crossing dream realised after 200 years

While perusing the University of Edinburgh archives, geographer Bruce Gittings came across a plan for a bridge which bears some resemblance to the Queensferry Crossing which is the latest bridge to cross the Forth.



Engineers could not be persuaded to build the design dreamt up by engineer and surveyor James Anderson 200 years ago, but now it seems his dream may become reality.

Anderson put forward a "Bridge of Chains proposed to be thrown over the Frith [sic] of Forth" and this was published in the Gazetteer for Scotland, a project to record every settlement and landmark in Scotland.

He envisaged a roadway linking North and South Queensferry 72 years before completion of the iconic Forth Bridge in 1890.



Both Anderson's design and the new Queensferry Crossing are suspension road bridges, with their supports extending as straight lines from the towers, in both cases resembling the sails of an immense yacht.

Edinburgh-born Anderson's scheme has the roadway supported by chain cables, forged from iron bars, very similar to Thomas Telford's bridge across the Menai Strait in North Wales.

Anderson, who was friendly with Telford, suggested that the success of Telford's Menai Suspension Bridge, begun in 1819, was a good reason that his own design should be built.

He proudly suggested his bridge would "facilitate the communication between the southern and northern divisions of Scotland". At the time, the cost was between £175,000 and £200,000, which would equate to around £840 million today. The Queensferry Crossing has cost around £1 billion to complete.

James Anderson was born in the Old Town of Edinburgh, the son of a textile worker. He died at his home in the city in 1861 and he is buried in Old Calton Burial Ground.

The Gazetteer for Scotland, www.scottish-places.info, was the first description of Scotland to be published online in 1995 and remains the largest, with more than 25,000 entries. According to Gittings, maintaining this remarkable geographical, historical and educational resource is, as used to be said of painting the 1890 Forth Bridge, a never ending process.



Queensferry Crossing from the south

Bruce Gittings, of the University of Edinburgh's School of GeoSciences, said: "It is great to be able to add the Queensferry Crossing to the Gazetteer, and important to remember Anderson's pioneering work.

"His design was beyond the engineering capabilities of the time, as evidenced by the collapse of the Tay Bridge in a storm in 1879 and of the Chain Pier at Trinity in Edinburgh – on which Anderson also worked – in 1898."

The Queensferry Crossing opens to traffic tomorrow 30 August 2017. All vehicular traffic will pass across it on 30 and 31

August when only pedestrians and cyclists will use the Forth Road Bridge.

The newly completed bridge will then be closed between 1 and 7 September 2017 to allow for the official opening ceremony, and for pedestrians who have won tickets in a ballot to experience a once in a lifetime opportunity to cross it on foot.

From 7 September 2017 the bridge will be open to all traffic, and when improvements have been made to the road infrastructure at the north end of the Forth Road Bridge, the Queensferry Crossing will be upgraded to a motorway and the speed limit increased from the initial 40mph to 70mph.

After that the Forth Road Bridge will become a public transport corridor.

