## INSTITUTION FORUM

## ICE plans further CISC support

ICE'S EDUCATION training and membership committee is recommending to executive that the Institution should support the continuation of the Construction Industry Standing Conference for another year.

CISC, which is working to develop a framework of national vocational qualifications for technical, professional and managerial positions was originally set up with a mandate only until summer 1992.

Costs of a further year would be paid through the Construction Industry Council; ICE's share would be about \$3000.

ET&M was given details of CISC's progress to date. CISC reported that it is on target to deliver a comprehensive framework of occupational standards in technical, professional and managerial disciplines by the middle of this year.

The next major task for CISC is to bring practitioners together to review and set occupational standards across a wide spectrum of disciplines.

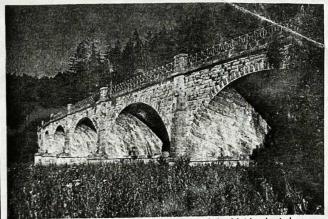
Work due for completion before

July includes the circulation of standards throughout the industry, helping professional institutions review their existing arrangements, developing qualifications and ways of 'importing' and 'exporting' standards between different industry sectors.

CISC would need an extended remit to carry out tasks such as discussing with professional institutions and others, ways of testing achievement.

There will also need to be arrangements for submitting new awards to the National Council for Vocational Qualifications. Quality and co-ordination of publicity needs to be improved, and there will also be work in advising teaching and training institutions of the new arrangements and persuading them of the advantages.

CISC felt there would be a continuing need for a co-ordinating body and that new needs will begin to emerge, including the quality assurance of standards and awards, marketing the new framework and updating and reviewing standards.



The trust's first aim is to halt deterioration of the Neidpath viaduct.

## Talk helps save bridge

A CAPACITY audience heard Roland Paxton's talk on the historic bridges of Peebles.

Paxton chairs the ICE's Panel for Historic Engineering Works and, as he gave the talk at a joint meeting of ICE and the Peebles Civic Society, there were many non-engineers in the audience. Paxton began by describing the basic engineering principles of the three main types of bridge to be found near the town centre – the arch, the beam and the suspension bridge.

He concentrated on the fine Neidpath viaduct, locally known as the Queen's bridge, now no longer in use. It is built both on the curve and on the skew. Paxton used slides to take the audience through the method by which designers George Cunningham and Robert Murray calculated the stresses in the structure and produced working drawings.

The audience was intrigued by the ability of the Victorian engineers to set out intricate structures with only the help of logarithm tables.

A brief look at other bridges, including a delicate suspension bridge known as the wire bridge, was followed by lively discussion on the future of the Neidpath viaduct. The society is determined to help preserve this outstanding viaduct and is looking to set up a trust, with the first aim to halt further deterioration of the structure.

EAST MIDLANDS

## Peterborough hosts steel and concrete debate

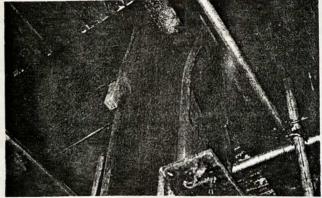
A HEAVYWEIGHT contest was fought out between the two building materials concrete and steel at a Peterborough branch meeting held jointly with the Structurals.

Defending concrete was Dr Howard Taylor of Costain Downac and current vice president of the IStructE. Upholding steel's virtues was the manager of British Steel General Steels advisory service, Peter Wright.

The contest consisted of two 30 minute rounds in which each speaker put over the merits of his material. Talks were given in a lighthearted manner; nevertheless salient points were argued out.

Taylor's first blow was to reiterate the inherent fire resistance of cast in situ and precast concrete frames, producing statistics and charts of the behaviour of concrete damaged by fire.

Wright replied by highlighting the record of fire damage to steel



Steel beams deformed under the intense heat of the Broadgate fire but the frame survived.

frames. He spoke about the recent example of the Broadgate development where there was accidental fire damage before the steel received its fire protection (NCE 12 July 1990).

Only isolated repairs were found to be needed to reinstate the frame to its original condition.

Taylor was quick to point out the flexibility of concrete and the benefits of forming structural concrete elements on site, allowing the engineer to make significant alterations in structural form. Wright retorted that on-site alterations to steelwork were often carried out on refurbishment schemes, and that methods such as site welding and site drilling are available.

Wright then put forward perhaps his most powerful argument for adopting steel: speed. He referred to 'the perfect example' – the Canary Wharf tower, made of a steel frame, steel sheeted floors and steel cladding. But Taylor reminded the audience that the same benefits can be achieved with precast concrete.

Other points were also debated, ranging from the detailing of connections through to the complexity, or otherwise, of the design codes for each material.

The referee John Goodliffe declared the result to be a draw, and that a rematch would have to be set for another day.