Masonry arch bridges are long-lived structures that continue to form a vital part of our transport infrastructure. However, they are facing a number of challenges associated with their extended period in service and the changing requirements of modern transport systems.

CIRIA C800 provides new guidance on the assessment of masonry arch bridges, building on recent research findings and the advice available in CIRIA C656, DMRB and Network Rail codes. Specifically, the guidance promotes the use of the Permissible Limit State (PLS), the point beyond which progressive load induced degradation occurs under service loads during the intended life of a bridge.

At the event lead author of the new guidance Matthew Gilbert will present an overview of CIRIA C800 and also examples illustrating how the PLS can be applied in practice. This will be followed by a Panel Discussion on the assessment of masonry arch bridges, involving Matthew and CIRIA Project Steering Group members Philip Gray (Chair), Peter Sparkes and Jon Shave.

Matthew Gilbert is a Chartered Civil Engineer and a Professor of Civil Engineering at the University of Sheffield. He has carried out research on the behaviour of masonry arch bridges over a period of thirty years. His research has been funded by many organisations, including EPSRC, Network Rail and the International Union of Railways.

Philip Gray is a Chartered Engineer and a Principal Engineer (Surface and Highway Structures) at Transport for London. He served as chair of the Project Steering Committee overseeing the development of CIRIA C800 and is the outgoing Chairperson of the Engineers Ireland GB Region.

Peter Sparkes is Associate Director (Bridges and Structures) at AECOM. He has over thirty years’ experience of assessing bridges and is a co-author of CIRIA C788 (“Structural Health monitoring in Civil Engineering”), published in 2020, and co-author of CIRIA C764 (“Hidden Defects in Bridges – Guidance”), published in 2017.

Jon Shave is Technical Director at WSP. He chairs BSI committee B/525/-/3, that looks after standards on structural assessment and retrofitting of existing structures. He was involved in drafting DMRB CS454, the assessment code for highway bridges and structures that superseded BD21/01 in 2019.

REGISTRATION DETAILS:

This a hybrid event with limited places available for in person attendance.

Those wishing to attend in person at ICE’s headquarters in London should register HERE to request a ticket.

Those wishing to attend online can register HERE.