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PREFACE

Bridges are built for Clients by construction industry teams of Designers, Contractors and Subcontractors with representatives of the Client. For a bridge constructed of steel, with or without a concrete deck, the Steelwork Contractor is either the major subcontractor or, on occasions, the Principal Contractor. The Steelwork Contractor is often, but not always, responsible for the erection of the steelwork on site as well as for fabrication. Whatever the contractual relationships within the team, success is achieved only through communication, cooperation, coordination and leadership. Effective teamwork depends on mutual understanding of roles and responsibilities and the effects on and consequences for others of team members' choices and decisions: performance depends on following best practice.

For most participants other than the Steelwork Contractor's construction specialists, bridge erection can seem like the tip of an iceberg; what is seen to happen on site appears relatively straightforward, if sometimes spectacular, but little is known of what goes into achieving an efficient, safe process. Erection is the culmination of a sequence of activities, every one of which is significant, from selecting the site and conceptual design right through to how the components are delivered. Indeed the plans for erection may influence design and will certainly define the fabrication process.

It is in the interests of better teamwork for the steel bridge industry to explain the whole process; there is a cultural gap to be overcome between civil engineering and engineering construction. The aim of this guide is to give new participants in bridge construction involving major steelwork – whether working for Client, Designer, Principal Contractor, or Steelwork Contractor – an understanding of the process leading up to what happens on site, and not just what is done there. As in all construction, safety is a fundamental driver of decision-making and planning: the aim is to describe best practice in today's construction market and thereby help all participants to fulfil their responsibility for health & safety.

This is neither a bridge construction manual nor a safety handbook; rather, it is an introductory guide and reference is made to other industry sources of expert guidance and information. It is complementary to the BCSA publication *Steel Bridges: A Practical Approach to Design for Efficient Fabrication and Construction*, published in 2002.

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