

## **Rebar Stability Update**

# SafetyAlert

December 2015

### **Incident description:**

A rebar cage for the central pier of a road bridge collapsed whilst under construction. Access to the structure for steel fixing was via scissor lifts and as the structure collapsed the red scissor lift was knocked over.

Two steel fixers working in the red scissor lift were injured in the incident. One suffered a broken ankle whilst the other sustained life threatening injuries.

#### Investigation/findings:

- Incorrect engineering judgement led to misconceptions that the rebar cage did not need temporary supports/props. This decision was not independently reviewed by a competent Temporary Works Designer.
- The rebar cage was not designed to be free standing and collapsed when ad-hoc props were used to try and plumb the cage.
- The Temporary Works procedures were not explicit enough to ensure that the rebar cage received the necessary temporary works design and check.
- The risk of collapse was not foreseen by the site team and as a result the required control measures were not identified and implemented.
- The perception regarding a freestanding design resulted in reassurance of stability and safety being given to personnel who raised concerns when the structure started to lean to one side.
- Stability concerns were discussed remotely by the key decision makers rather than visiting the structure on site to make a visual assessment.
- None of these concerns were felt to be strong enough to stop the work, clear the area and challenge the judgement about the stability of the structure. The concerns were not elevated to the site Senior Management.

#### **Actions:**

By 18<sup>th</sup> December 2015, supply chain Project Managers are to confirm to your relevant Highways England Regional Health and Safety Business Partner that:

- 1. Your contract has a formally appointed Temporary Works Co-ordinator with suitable qualifications, experience, skills and resource to perform their role.
- Your contract Temporary Works Coordinator has received and read this alert and the Temporary Works Forum (TWf) 'rebar stability safety bulletin'. <a href="https://www.twforum.org.uk/media/70138/tw15.116">https://www.twforum.org.uk/media/70138/tw15.116</a> rebar stability safety bulletin.odf
- Your organisation has a mechanism to share lessons from incidents and good practice with the Temporary Works Coordinators throughout your whole business.



#### **Further Information:**

For more information about this incident please contact Liz Brathwaite – Health & Safety on 07710 395454 Elizabeth.Brathwaite@highwaysengland.co.uk Information about alerts process contact <a href="mailto:PTSProgrammeOffice@highwaysengland.co.uk">PTSProgrammeOffice@highwaysengland.co.uk</a>