

The Drawing Board

Judged by Ron Slade

This month Ron has selected two sketches – by Luis Correia of AKT II and Jakub Nowikowski of Pole Structural Engineers. Each receives an e-book of their choice from the Institution's current catalogue.

Ron's comments

Two very clear and confident sketches produced for different reasons. I like the use of colour in both. Luis Correia, a Senior Engineer at AKT II, says that his sketch was produced to illustrate the construction sequence of a steel transfer beam within the Ghana National Cathedral project.

Jakub Nowikowski, at Pole Structural Engineers, produced his sketch to be read in conjunction with a structural survey report concerning an existing timber framed building. He says the frame construction was lacking typical joint connections such as mortise and tenons and all the frame elements were fixed together by insufficient numbers of nails or screws. There were no restraining or bracing elements providing either appropriate robustness, restraint or lateral stability. Beams over the supporting posts were notched to allow for overlap connection. Unfortunately, some of the beam bearings were over-notched, producing visible signs of distress. Due to the inadequate connection details between the members of the timber roof trusses and timber frame elements, the recommendation was to introduce additional timber bracing members and steel framing brackets and plates to provide enhanced lateral stability and robustness. The sketch was easy to understand, and the client found it more helpful than a written report.



Ron Slade

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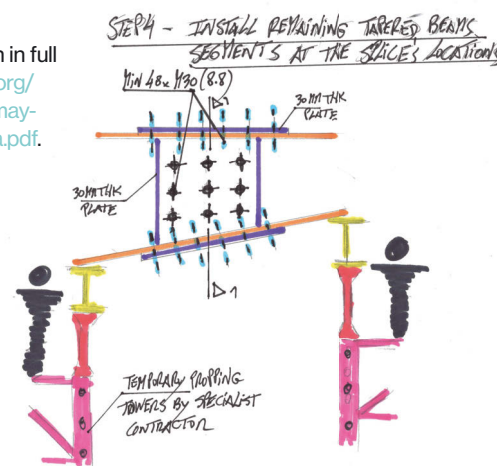
Ron Slade is Structural Director at WSP. Ron received his BSc First Class Honours in Civil Engineering at City University, London and became

a Chartered Member of the Institution of Structural Engineers in 1971 when he was awarded the Institution's A.E. Wynn prize. He was

first appointed as a director in 1982. Ron is the author of *Sketching for Engineers and Architects*, published by Routledge.

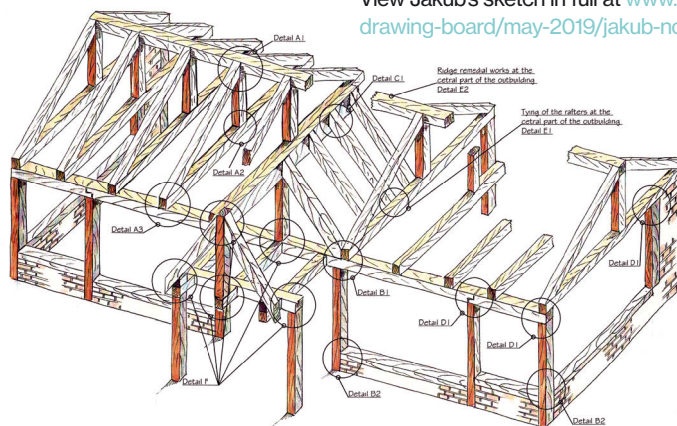
Luis Correia

View Luis' sketch in full at www.istructe.org/drawing-board/may-2019/luis-correia.pdf.



Jakub Nowikowski

View Jakub's sketch in full at www.istructe.org/drawing-board/may-2019/jakub-nowikowski.pdf.



DON'T FORGET TO SUBMIT YOURS...

To enter, submit a sketch to tse@istructe.org together with a short description to put it into context (150 words). Sketches must be hand drawn (no CAD, except for 'guided freehand') and from a real project (i.e. not drawn for the competition). The next deadline is 1 July 2019.