Cite this article

Wohlers DC (2022)

Discussion: Potential structural deficiencies within the Gokteik Viaduct Railway Bridge in Upper Burma. *Proceedings of the Institution of Civil Engineers – Engineering History and Heritage*

175(1): 33,

<https://doi.org/10.1680/jenhh.2022.175.1.33>

Discussion

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Discussion: Potential structural deficiencies within the Gokteik Viaduct Railway Bridge in Upper Burma

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Contribution by D. C. Wohlers

The author of the original article (Wohlers, 2022) went to great lengths to search for original engineering drawings of the Gokteik Viaduct in Upper Burma. This search included the British Library, various museums, a steel company that now occupies the former site of the Pennsylvania Steel Company in Steelton, PA, USA, and numerous online archives. However, the exhaustive search yielded only one primary source that contained several details of the structure. The 26 January 1901 edition of *Engineering Record* showed a schematic cross-section of bent #23 (Figure 5), a profile view of the entire bridge span with key spacing and height dimensions (Figure 6), and typical connection details (Meyer, 1901, p. 77). After publication of the article by Wohlers (2022), the author relied upon information from the 1901 edition of *Engineering Record* to replicate a basic set of engineering drawings, which enhance appreciation for the viaduct and may help other engineers explore potential structural concerns. The author welcomes feedback and assistance from other engineers who may wish to contribute to a structural analysis of the Gokteik Viaduct.

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Figure 6. Cross-section of bent #23

Figure 5. Profile view of the Gokteik Viaduct with a Baldwin Mogul Locomotive (to scale) above bent #23. Note that the bridge span is 2260 ft (688.85 m) and a maximum height of 320 ft (97.54 m)