



Our rail team deliver a range of design services for projects for our Rail clients including Network Rail and their Tier 1 and Tier 2 framework contractors.

Aberdeen Station, Roof Truss Analysis

Aberdeen Station dates from the early 20th century and is an important asset in Network Rail's portfolio in the North of Scotland. The roof comprises of large span early-steel arched truss girders spanning a large open concourse.

RBA Ltd were commissioned on behalf of Network Rail to develop strengthening solutions following assessment of the truss capacity to modern standards.



Working in partnership with a Tier 1 contractor our experienced structural engineers completed a detailed inspection of the structure over a series of nightshifts, when the station was closed to the public, and access could be gained using ground mounted MEWPs.

The RBA team provided the following services;

- Tactile survey of the truss members to evaluate condition and dimensional information
- Structural analysis of the existing structure
- Identification of conservatisms within the previous structural assessment using advanced FEA techniques and modelling software
- Preparation of a technical report compliant to NR/L2/CIV/003, outlining the findings of the analysis
- Recommendations for future inspection and maintenance works

As a result of RBA's analysis the client was able to de-scope the project, saving a considerable sum on intrusive strengthening works.

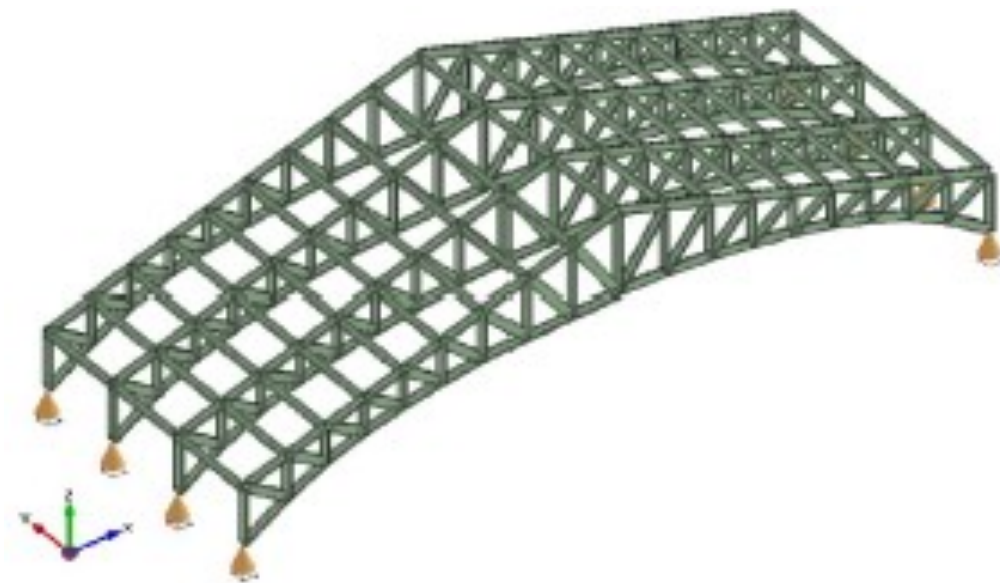


Photo: FEA Structural Modelling