ACROW

Temporary Bridge Maintains Access to Local Village During Network Rail Project

Communities remain connected with a modular steel structure throughout the construction works

When Network Rail planned to replace a bridge over the Aberdeen-Dundee railway line in the village of Craigo, Montrose, Scotland, there was concern that local traffic flow would be seriously interrupted. After the existing bridge was closed for construction, the only access to the village would be a 3-tonne weight-restricted bridge, prohibiting most traffic, including emergency response vehicles and refuse trucks. To mitigate the impact of the project, a temporary modular vehicular bridge from Acrow was installed.

Acrow hired the modular steel bridge to AmcoGiffen, a principal contractor to Network Rail. The 700XS® panel bridge is 33 metres long and 4.2 metres wide, with an external 1.5-metre-wide cantilevered footwalk. Fabricated with 100% steel components, the bridge features an epoxy resin anti-skid deck and is designed to carry Eurocode LM1, LM2 and LM4 traffic as well as a relocated water pipe.

The project began in September 2024, and the modular bridge was delivered to the site on November 18. After assembly, the bridge was lifted into place with a 750-tonne crane during an overnight rail possession on November 30. Once the structure was in position, the contractor installed Network Rail-compliant edge protection behind the parapets on the bridge and footwalk. The temporary bridge will remain in use until the new bridge is completed.

Easily assembled and rapidly installed, Acrow's bridge proved the perfect solution for this unique project, requiring work over and around active rail lines. Acrow's temporary hire solutions are a cost-effective and safe alternative to lengthy road closures or diversions, helping to deliver projects quickly, safely and efficiently.

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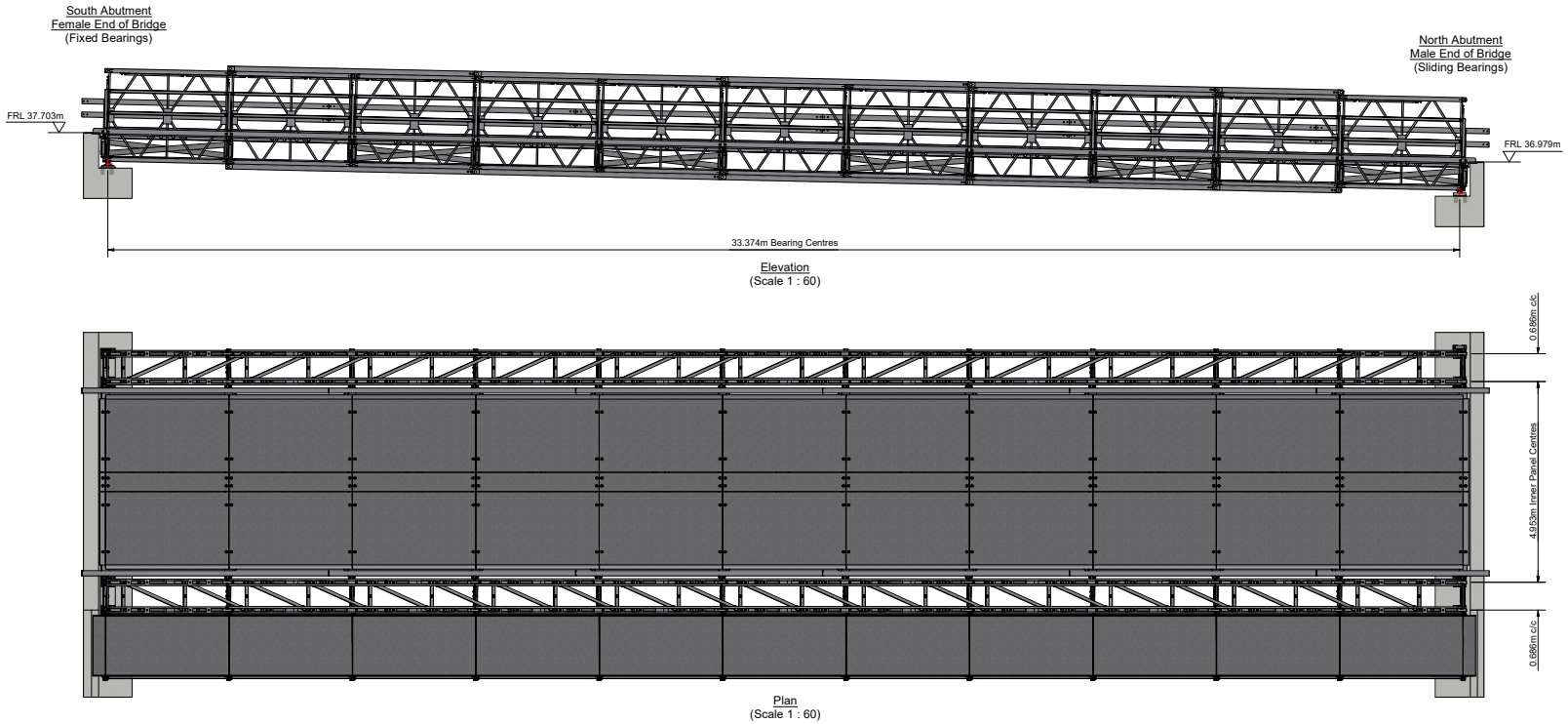

Specifications

Bridge length:

33m

Roadway width:

4.2m + 1.5m cantilever footwalk

Parapets:

TL-2 Parapets

Deck surface:

Anti-skid epoxy aggregate

Bridge erection method:

Crane lift in

Design load:

Eurocode LM1 and LM2 and LM4 traffic + a diverted water pipe (1.05kg/m) + timber cladding to be fitted by other (648kg)

Standard Acrow Bridge finish:

- All major components galvanized to AASHTO M111-ASTM A123
- All bolts are hot-dip galvanized
- All pins are electrogalvanized

Standard Acrow Bridge specification:

(A) Panel chords, diagonals, verticals, reinforcing chords, rakers to AASHTO M223 GD 65

(B) Raker braces, transoms, top chord braces, swaybraces, transom braces, diagonal chord braces, decking to AASHTO M223 GD 50

(C) Panel pins to ASTM A 193 GD B7

(D) Bolts to AASHTO M164M – A325

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