



Acrow's Detour Structure Provides Access Over Railroad During Bridge Replacement in Pennsylvania

Temporary modular steel bridge accommodates vehicles and pedestrians in Allegheny County

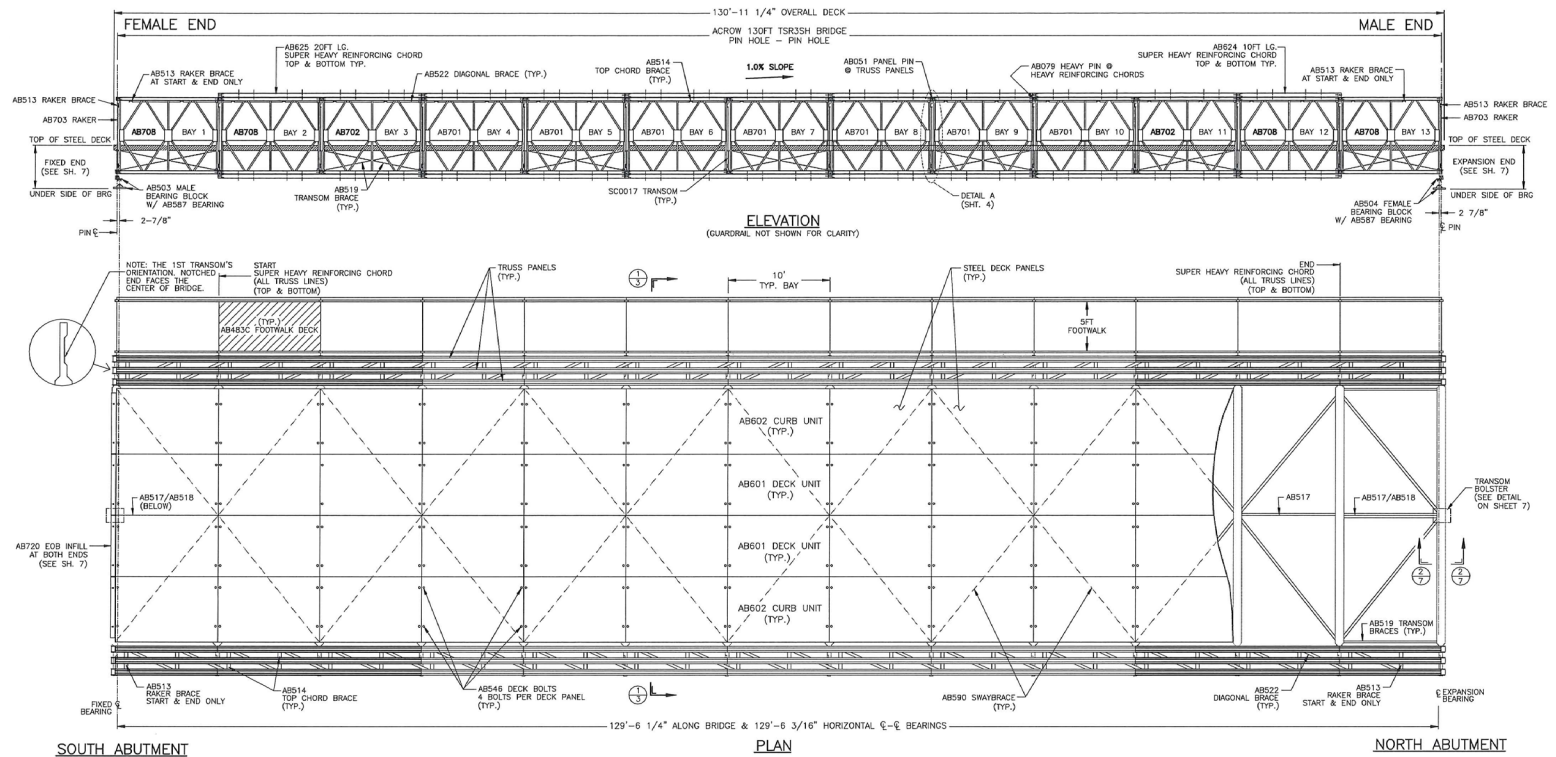
Situated just outside of downtown Pittsburgh and constructed in the early 1900s, the Kenmawr Bridge carried vehicular and pedestrian traffic over the mainline tracks of the Norfolk Southern Railroad. After an inspection in 2012 found it structurally deficient and functionally obsolete, the weight limit reduced from 12 tons to 6 tons. In 2014, Pennsylvania Department of Transportation announced plans to replace the structure. With no viable long-term detour available, a temporary bridge was necessary to minimize construction impacts on the heavily-traveled regional link.

The project broke ground in 2020. The contractor, Golden Triangle Construction Co., Inc., ordered a modular steel bridge from Acrow to maintain traffic flow until the completion of the new permanent bridge. Acrow's two-lane structure was 130 feet long (39.62m) and 24 feet wide (7.35m) to accommodate bidirectional

vehicular traffic and had a 5 foot (1.5m) walkway for secure pedestrian travel. The surface was asphalt overlay. It was installed west of the old Kenmawr Bridge using a crane-assisted launch and opened to traffic in August 2020. It remained in service until the opening of the new structure in July 2021.

Acrow's versatile modular steel bridge proved an ideal solution for this project. Compact components were delivered to the site through congested streets with ease and built and installed quickly, requiring only a single weekend closure of the route.

Available for rent or purchase, Acrow's bridges provide cost-effective, safe detours around work sites during bridge replacement or repair. Rapidly installed in days, they provide a faster and more economical alternative to traditional phased construction and enable accelerated bridge construction for priority projects.



Specifications

Bridge length:

130' (39.62m) single span

Roadway width:

24' (7.35m) single lane

Deck surface:

Asphalt overlay with a crown

Bridge erection method:

Crane-assisted launch

Design load:

PHL 93 + P82

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