

McKinley Street Grade Separation (USA)



Project description

The McKinley Street Bridge in Corona, California is being built to provide a “grade separation” solution to improve traffic flows where the McKinley Street crosses a busy railway line, a canal and another road, all at ground level.

The new bridge has a span of 87.2 m (286 ft) and will raise the driving surface of McKinley Street to approximately 9 m (30 ft) at its highest point.

With the project’s financing requiring its funds to be utilized within a short time-frame, the urgency to plan and organize the project, and to design and construct the new structure, was a defining criterion from the outset.

The project is located in the City of Corona, California

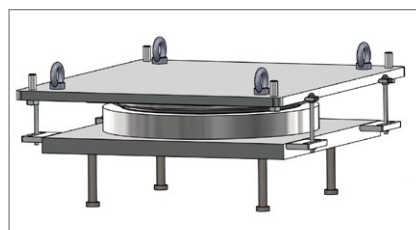


mageba scope

A key consideration in the bridge’s design was the need for it to withstand any earthquakes that might be expected in the area. mageba’s comprehensive solution incorporating all aspects of the structure’s support and movements consist of 4 RESTON®SPHERICAL bearings, each free-sliding, designed to support vertical loads of 3,694 kips (16,421 kN); 158 LASTO®BLOCK elastomeric bearings, featuring horizontal movement restraints as required; 8 RESTON®PSD preloaded spring dampers, designed to provide horizontal fixity in service conditions but to permit the kind of seismic movements that would severely damage the structure; and 4 RESTON®SA shock absorbers, designed to accommodate and control movements in service conditions.

The 2 TENSA®POLYFLEX®RapidCure joints supplied are entirely compatible with the seismic isolation solution, and capable of dissipating energy in any direction with little or no damage, except in the largest seismic events.

Design representation of one of the four RESTON®SPHERICAL bearings



Highlights & Facts

mageba products:

Type: RESTON®SPHERICAL and LASTO®BLOCK bearings, RESTON®PSD dampers, RESTON®SA shock absorbers, TENSA®POLYFLEX® RapidCure joints

Installation: 2023

Structure:

City: Corona, CA
 Country: USA
 Type: Tied arch bridge
 Main span: 87.2 m (286 ft)
 Owner: City of Corona
 Contractor: Walsh Construction Company II
 Designer: Biggs Cardosa Associates

The installed RapidCure joints are able to accommodate sizeable displacements in any direction

