

North Washington Street Bridge (USA)



Project description

The new North Washington Bridge in Boston, MA will replace the existing bridge which has served northern Boston for over 100 years. Construction of the new bridge started in 2018 and will continue through till spring 2023. Once complete, the new bridge with an arch main span will feature a dedicated bus lane and bicycle track and sidewalk in each direction. The new structure will also improve water flow and conditions for boaters by reducing the number of piers in water from 12 to 5. The total estimated cost of the bridge is about \$177 million.

mageba scope

mageba’s scope on this project included design and supply of 48 disc bearings of fixed and guided type. The range of bearings includes vertical loads from 580 kips up to 2,270 kips. All bearings feature beveled sole plates, sloped in both longitudinal & transverse directions. To support the construction process, some of the guided & fixed bearings were also equipped with temporary locking & temporary sliding systems respectively.

To ensure long service life of bearings and to minimize maintenance, the upper and lower bearings, sole plates, and masonry plates were hot dip galvanized, while the sliding plates (with welded stainless-steel sheets) were zinc spray metalized.

All bearings were manufactured and delivered in January 2021.

Highlights & Facts

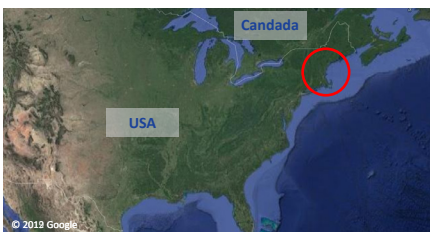
mageba Products:

Type: RESTON®DISC bearings
 Feature: Loads up to 2,270 kips (10,100 kN)
 Installation: 2021

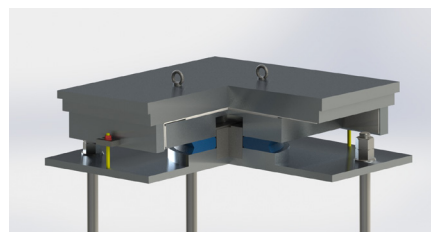
Structure:

City: Boston, MA
 Country: USA
 Type: Arch Bridge
 Main span: 190 ft (57 m)
 Length: 1,089 ft (332 m)
 Completion: 2021
 Owner: City of Boston
 Contractor: J.F. White Contracting
 Engineer: MassDOT

The Washington Street Bridge is located in northern Boston



3D render view of a guided disc bearing



Assembled disc bearing in factory, showing its movement scale

