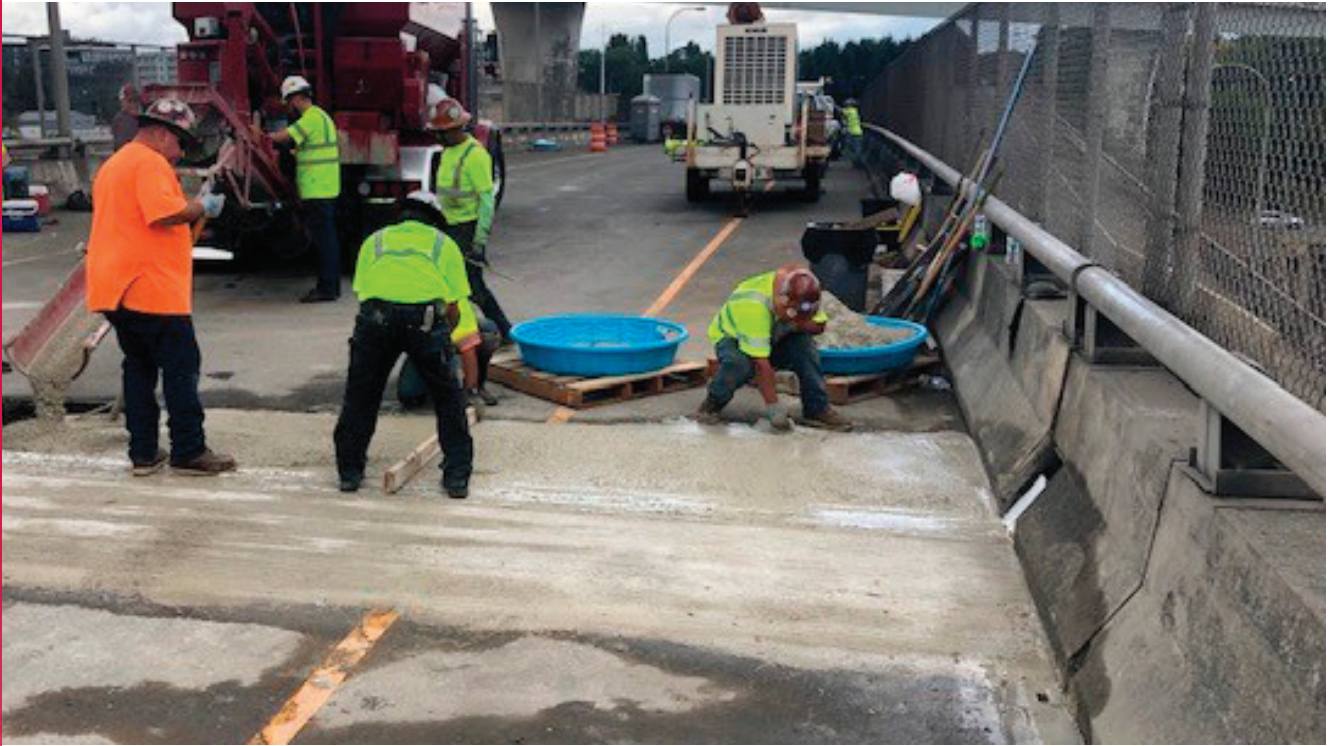




## PROJECT BRIEF



# REPAIRING LONGEST MAIN SPAN BRIDGE IN OREGON

**Project Type:**

Bridge

**Application:**

Bridge joint repairs

**Location:**

Portland, OR

**Project Dates:**

May 12, 2019 – August 30, 2020

**Project Owner:**

Oregon Department of Transportation

**Project Size:**

38 bridge joints, 300 tons

**Product:**

Rapid Set® DOT Repair Mix

The Fremont Bridge, located in Portland, OR, is a steel tied-arch bridge over the Willamette River. I-405 and US-30 traffic traverse the bridge between downtown and North Portland. The bridge contains two decks carrying vehicular traffic, each with four lanes. It has the longest main span of any bridge in Oregon and is considered the second longest tied-arch bridge in the world after the Caiyuanba Bridge in China.

The construction on the Fremont Bridge began in May 2019 and was completed in August 2020. Oregon Department of Transportation decided to use Rapid Set DOT Repair Mix to repair the bridge joints—300 tons of DOT Repair Mix were used to repair 38 bridge joints. DOT Repair Mix is a high-performance fast setting concrete structural repair material that conforms to ASTM C928. The specifications called for 2500 psi to open the bridge and 4000 psi at 28 days.

To facilitate the repairs, the contractor used a mobile mixer onsite. The joints were finished by hand and then cured with wet burlap. Since the repairs wrapped over different seasons, multiple weather conditions were encountered.

One of the biggest challenges for the contractor was meeting the Monday morning reopening times after the weekend closures. The contractor rose to the challenge and reopened the bridge on time, every time.