

## Sarah Mildred Long Bridge

Kittery, ME - Portsmouth, NH

### Project Description

The original Sarah Mildred Long Bridge, built in 1940, provided a regional link between Maine and New Hampshire, and was the critical backup route in case of disruption on the Interstate 95 bridge. The new bridge alignment improves marine navigation by straightening the navigational channel, allowing larger ships to access the port and shipyard. With a larger 56' vertical clearance in its "resting" position, there are 68% fewer bridge openings. In the normal operating, "resting" position, the bridge's lift span is at its middle level, allowing motor vehicles to cross the river. The new bridge's movable "hybrid" span lifts up to allow passage of tall vessels and lowers to railroad track level for trains to cross. 200' tall precast concrete towers support the 300' long streamlined structural steel box girder lift span. The new bridge layout uses eleven (11) fewer piers than the original bridge.

### Owner

Maine DOT & NH DOT

### Contractor

Cianbro

### Designer

FIGG / Hardesty & Hanover J.V.

### Our Role

McNary Bergeron & Associates provided construction engineering services including longitudinal construction analysis, geometry control, erection manuals, design of temporary works, and Integrated precast concrete segment shop drawings for 239 vehicular, 137 railroad and 88 tower segments.

### Total Contract Value

\$164 million

### Timeline

2015 - 2017

### Construction Method and Specifications

- Two-level precast segmental approaches crane erected from barges and trestle
- Integral shared piers
- Precast cofferdam tub footings
- Four precast segmental mainspan liftspan towers

