

LESNER BRIDGE

The new Lesner Bridge is composed of twin pre-cast segmental structures 1575' long that will handle six lanes of traffic. The new bridge replaces an existing low level causeway and will provide a signature structure that increases the vertical clearance above mean high water and horizontal clearance at the navigation channel.

OUR ROLE

McNary Bergeron is providing construction engineering services including: integrated shop drawings for pre-cast superstructure segments, independent review of the segment erection launching gantry, construction analysis of the superstructure and substructure for the proposed erection sequence, step-by-step erection procedures, geometry control system, including segment casting software and erection geometry, development and design of temporary support systems for the launching gantry.

CONSTRUCTION METHOD AND SPECIFICATIONS

The bridges consist of 9 spans, each 150' long, built in the span-by-span construction method, and a 225' main span built in the balanced cantilever construction method. The contractor is using a specially fabricated overhead launching gantry that can accommodate both types of segment erection. Challenges on this project include incorporating both span-by-span and balanced cantilever post-tensioning details in the segments along with designing an erection system that can handle both systems.



OWNER
City of Virginia Beach

CONTRACTOR
McLean Contracting Co.

DESIGNER
FIGG

TOTAL CONTRACT VALUE
\$84 million

TIMELINE
2014-2017