The Moses Wheeler Bridge is located between Stratford and Milford, and this bridge carries I-95 over the Housatonic River. The new bridge is one of the longest and heaviest travelled bridges in Connecticut, carrying 135,000 cars and trucks per day. Epoxy-coated reinforcing steel (ECR rebar) was used in the substructure and deck used because of its corrosion protection against salt-induced damage.

The 136 ft-wide replacement bridge will use a continuous steel plate girder design. The new bridge will occupy roughly the same footprint as the existing span. To make this possible, the project is to be done in stages to maintain traffic over the river. The new bridge is designed for seismic loading to withstand a major earthquake. Additionally, it includes a fender system to protect the bridge piers from ship collisions.

Aesthetic features include encasing the bridge piers with decorative granite and aesthetic lighting.

Construction involves demolition of the 92-ft wide existing bridge, opened in 1958, and replacement while maintaining the existing 6-lane highway. Four full-width shoulders are to be added to the new structure to reduce closures due to traffic accidents or police activity.

Team

Owner: Connecticut Department of Transportation

Engineer: STV Group

General Contractor: Walsh Construction Company and PCL Constructors

Design Criteria:
- Provide new structure to replace the structurally deficient bridge while maintaining traffic across river.
- Design structure for earthquake loads.
- Provide long-term corrosion protection.

Total Project Cost: $400 million

Total Size:
LENGTH: 3200 ft
WIDTH: 136 ft

Photography: moseswheelerbridge.com
STV Group