

MANETTE BRIDGE - Bremerton, WA



Lift-in precast pile cap cofferdams and spliced girder falsework

SERVICES PERFORMED

- ◆ Design of Drill Platforms
- ◆ Design of Tipping Frame for Drilled Shaft Cages
- ◆ Design of Lift-In Cofferdams for Pile Caps
- ◆ Splice Girder Erection Sequence Analysis and Falsework Design

PROJECT INFORMATION

Year of Completion: 2012

Construction Cost: \$59 M

Client: Manson-Mowat JV

Owner: Washington DOT

The Manette Bridge is located in Bremerton, Kitsap County, Washington. The bridge spans the Port Washington Narrows, a 3.5 mile long and 0.25 mile wide fjord which connects Dyes Inlet with Sinclair Inlet. The bridge is critical to the Bremerton community, providing a link between the eastern and western portions of the city. The new bridge replaces the existing bridge with a new concrete bridge. The new Manette Bridge was built parallel to and immediately south of the existing bridge. The project required three years to complete.

The Manette Bridge was originally built in 1930 and was constructed with five steel truss spans. In 1990, the Manette Bridge was identified as both structurally deficient and functionally obsolete and it was added to the WSDOT Bridge Replacement Priority Array List in December of 1993.

The new bridge replaces the old Manette Bridge with a new concrete splice girder bridge. The contract for construction of the new Manette Bridge was awarded to Manson Construction in early 2010. The new bridge was built parallel to and immediately south

of the original bridge, with roadway connections to existing city street intersections on each end of the bridge. Construction of the new bridge began in 2010 and was completed in less than 3 years.

Manson Construction selected Bittner-Shen Consulting Engineers to perform all construction engineering for the drilled shaft foundation work, temporary lift-in cofferdams for precast pile caps, girder erection sequence analysis and falsework design.



Lifting in of precast cofferdam



BITTNER-SHEN CONSULTING ENGINEERS, INC.

SPECIALTY ENGINEERING: STRUCTURAL · GEOTECHNICAL · CONSTRUCTION · MARINE

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