

Strengthening Structures | Protecting Lives Worldwide.











Transportation

Buildings

Pipelines

Waterfront

Industry



Project: Structural Upgrade of Irving Oil Refinery

Location: Saint John, NB,

Canada

Client: Irving Oil Refinery

Structural Upgrade of Irving Oil Refinery, Saint John, NB.

The port facility required their existing pier to be able to support higher loads. The timber piles needed to either be replaced with larger piles or strengthened.

The TYFO® PR Jackets, combined with the TYFO® SEH-51A System was designed to be installed in segments and to provide the required additional strength. The tides in this area are over 20-feet and when the tide is all-the-way out, it was possible to work without divers. The soil was quickly excavated to allow the PR jackets to be installed 7-feet below the mud line. The jacket segments were then added and then wrapped with the TYFO® SEH-51A reinforcing fabric, saturated with the TYFO® SW (water curing) epoxy, until the entire pile was covered. The annular space between the PR jackets and the piles was filled with grout and then new cross bracing was installed to complete the project.

Scope of Works:

 Structural upgrade of existing pier to support higher loads





