



PORT OF NEWPORT INTERNATIONAL TERMINAL RENOVATION

Category H: Transportation – Marine/Ports

EXECUTIVE SUMMARY: KPFF and GRI served as the structural/civil and geotechnical design consultants, respectively, for the renovation of the Port of Newport’s International Terminal located in Newport, Oregon. KPFF and GRI provided engineering services for the 400-ft-long cargo dock, 410-ft-long fishing dock, and 124- by 80-ft triangular RO-RO dock renovation.

Problem: The Port of Newport’s existing facility was founded on two scuttled WWII concrete liberty ships, the S.S. C.W. Pasley and S.S. Francois Hennebique, and consisted of an unusable cargo dock founded on the Pasley, a damaged timber fishing dock, an office and decaying warehouse founded on the Hennebique, and an elevated dock supported by corrosion-damaged steel piles. In 1996, the Pasley released fuel into the bay, bringing the decline of the hull's structural integrity to the Port’s attention and closing the facility to cargo. With accelerating deterioration, the Pasley hull exhibited cracking and listing with the tides, increasing concerns of another contaminant release. Project challenges included the existing concrete ships, environmental concerns, limited in-water-work windows, fishing fleet and longshoreman requirements, maintaining Port operations during construction, and the limited funding.

Solution: KPFF and GRI investigated site conditions and developed over 40 alternatives to meet project challenges to renovate the facility. Utilizing the CM/GC process and working closely with the contractor throughout the construction process to develop effective solutions, the project successfully remediated both vessels, demolished the Pasely outside of the in-water-work window through construction of a containment cofferdam, floated the Pasley for demolition, utilized new and existing elements to control costs, and incorporated the Hennebique into the final facility.