



Client

G3 Terminal Vancouver

Vessel Type

Bulk vessels

Location

Vancouver, British Columbia, Canada

Manoeuvring Feasibility Study Berthing and Un-Berthing G3 Export Grain Terminal LYNNTerm West

G3 requested the services of the MSRC to assess the navigational feasibility of receiving bulk vessels with capacities of 80,000 to 125,000 tonnes of deadweight at their proposed new Lynnterm West Facility.

The study has been conducted, with the collaboration of The British Columbia Coasts Pilots, on the MSRC's Class A and DNV approved full mission simulator (fully integrated bridge with modern instruments and an uninterrupted 330° field of vision).

For this study, the MSRC's in-house team developed a Post Panamax Ship Model (Kamsarmax - 229m x 36.5m x 13m) with a very high degree of accuracy and modified its own high-fidelity 3D geographical area model to include the new dock and the proposed bottom dredging work. Tidal Stream predictions for both diurnal and semidiurnal tidal/lunar phases were developed at a 25-metre grid spacing, with data layers for 0.3, 1.3, 2.3, 3.3, 5.1, 7.1, 9.6, 12.1, and 14.6 metres and greater. This provided a highly realistic representation of both the dynamic water levels (height of tide) and current/tidal velocities, including all expected back eddy effects as well as the outflow from the Lynn River.

