

RESUME

J. BRADY RICHMOND, P.E.

COASTAL ENGINEER

B.S., Physics, Pacific University (2002)

M.Oc.E., Coastal and Ocean Engineering, Oregon State University (2005)

Mr. Richmond's professional experience includes the disciplines of coastal and civil engineering, topographic and bathymetric data acquisition, data interpretation, and construction advisory. His areas of particular interest include coastal engineering design, physical model studies, construction advisory and optimization, and leveraging new technologies to improve acquisition nearshore data acquisition.

Since joining Coastal Frontiers in 2005, Mr. Richmond has participated in a number of coastal and nearshore monitoring studies throughout Southern California. These have included semi-annual beach profile monitoring programs conducted on behalf of the Bolsa Chica Wetlands Restoration, SANDAG, and the Cities of Carlsbad, Encinitas, Solana Beach, and Newport Beach, California.

More recently, Mr. Richmond has served as the project manager for a multitude of coastal engineering and nearshore data collection activities associated with the ongoing San Elijo Lagoon Restoration Project in Cardiff-by-the-Sea, CA. He has been involved in the early stage planning and execution of activities to meet or exceed permit stipulations set forth by the California Coastal Commission. The project includes both bathymetric and topographic data acquisition in the intertidal reaches of the lagoon, and dredged material disposal sites along the adjacent beach and nearshore region. Surveys are used to quantify post-dredge volumes and evaluate the dispersal of dredged material along the nourished beaches. Additional data acquisition, in support of project construction planning, has been performed through the use of unmanned aerial vehicles (UAVs or drones) to develop digital terrain models and ortho-rectified imagery through structure from motion photogrammetric techniques.

In the Arctic, Mr. Richmond has participated as a project engineer for the design, installation, and repair of the slope protection systems for several oil production islands and coastal pads in the Alaskan Beaufort Sea. Mr. Richmond also provided survey and engineering support during the installation of the subsea pipelines which service these offshore facilities. Additionally, Mr. Richmond has served as the project manager for coastal erosion studies at DEW Line Stations at Pt. McIntyre and Icy Cape, Alaska. These studies have included historical air photo analyses, ground survey programs, and LiDAR data interpretation to assess nearshore erosion at the abandoned coastal sites.

Mr. Richmond is a PADI certified SCUBA diver capable of performing underwater inspections and experienced in deploying oceanographic instrumentation. He also holds a commercial Remote Pilot certificate from the Federal Aviation Administration. He is a member of the American Society of Civil Engineers and is a registered professional engineer in the states of California and Alaska.