



PROJECT EXPERIENCE

PORT OF CORK UNDERWATER FACILITY INSPECTION—2010

The Port of Cork retained CEI Collins Engineers Ltd. to conduct underwater inspections of more than 4,500 linear metres of waterfront facilities. The project consisted of value engineering services, which included: an expedited schedule to minimise Port inconvenience; professional engineer-divers with unparalleled experience with these types of structures in corrosive environments; and the development of an inspection report comparing findings with the baseline survey undertaken in 2005 by Collins.

The initial project phase in 2005 consisted of building an electronic database that was customised for the Port of Cork's facilities and specific structural deficiencies. The program utilised criteria such as the facilities' structural importance, in conjunction with a structural deterioration rating to help determine where the Port should spend rehabilitation funds first.

A 4-person crew of professional engineer-divers performed the inspections. All elements of the facilities located in the water were inspected with particular attention being paid to areas near the water line and the effects of accelerated low water corrosion (ALWC). All members of the fender systems were inspected. Corrosion Potential Survey Readings were obtained using a bathycorrometer, and ultrasonic thickness readings of steel elements were also recorded.

The results of the inspection are being provided in a detailed inspection report and a comparison undertaken with the 2005 baseline survey. The report will comprise a detailed list of inspection findings, evaluations, and recommendations.

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