



## RESTORATION OF SPENCER DOCK SEA LOCK

Construction of New Lock Gates and Flood Protection

Design and Build by Pierse Construction

### SUMMARY:

**Value:** €4.3 million  
**Client:** Dublin City Council  
**Status:** Complete

**Services Provided:**  
Detailed Design of Design / Build Project  
Project Supervision

Nicholas O Dwyer were appointed Project Managers and Design Consultants by Pierse Contracting as part of the Design and Build contract for the Restoration of the Spencer Dock Sea Lock at the Royal Canal in Dublin. The project was to restore the existing stone lock to provide navigable access to the Royal Canal from the river Liffey and provide a permanent marine flood barrier.



There were extensive temporary works both for the excavation and dam to the Liffey. Our design services included the following:

- Temporary works for excavations up to 9m below ground in restricted site adjoining a major access road to the port.
- Concrete retaining walls and base slabs to form the new section for the flood barrier.
- Diversion of major services including major watermain and electrical cables.
- Anti floatation system for the barrier section as this is located below high water level from the river Liffey.
- Sector and Mitre gate system in conjunction with the supplier including Hydraulic System.
- Control Building and associated ground services.



Nicholas O'Dwyer  
CONSULTING ENGINEERS