

Refurbishment and Extension of Landmark Club House



Project in brief

Royal St. George Yacht Club is a landmark on the water front in Dun Laoghaire harbour, and is a Protected Structure dating from 1870.

The project consisted of two phases of work which were carried out on consecutive years.

Phase 1 involved work to improve access between the lower ground floor kitchens and ground floor restaurant. A new food hoist and stairs were introduced.

The more extensive Phase 2 consisted of the refurbishment and amalgamation of the lower ground floor changing rooms, modernisation of one of the club rooms and a 350m² copper clad extension to the side of the building.

Challenges

The building is on a tight and intensively used site. There was a demanding programme requirement to carry out work outside the main sailing season while nonetheless keeping the club open and fully functioning throughout (including the kitchens and restaurant).

From a design perspective there were two key challenges. First was the marine exposure. To provide the most robust structure in this harsh environment, we specified a special concrete mix containing a 70% GGBS / 30% CEMII blend which gives enhanced chloride protection to the reinforcement.

The second challenge on the design side was on the construction of the foundation. The rear extension is located on an old slipway / hard standing which was constructed of fill containing boulders to depths of between 2-5m. To overcome this Odex piles with a steel liner were taken down through the fill to bed rock.

The flat slab roof construction allowed the structural depth to be kept to a minimum as the height of the extension was critical in order to maintain sea views from the road.



Innovative solutions

The use of GGBS blended concrete not only has added durability as mentioned above but is a "greener" and sustainable choice incorporating a by product of industrial processes, thus resulting in lower carbon emissions compared to OPC.



LeeMcCullough
Consulting Engineers

Project 3274– Leisure and new build
Royal St George Yacht Club

Client: Royal St. George Yacht Club

Architects: Michael Collins Associates

Value: €1.8m

Lee McCullough Team:

Frank Lee

Richard McCrae

Project scope:

- Protected structure
- New Build Extension
- Marine Environment

Engineering New Buildings

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