

2003

Overall Winner & Infrastructure Category Award | Broadmeadow Bridge



The Overall Winner was the Broadmeadow Bridge in Swords, which carries the Northern Motorway across the Broadmeadow Estuary. The challenge was given by Fingal County Council to Arup Consulting Engineers, Dublin and their consulting architect Wilkinson Eyre Associates, London, to design a bridge at this environmentally sensitive location. Part of the Estuary is a protected area because of the population of migratory birds as well as the resident swans and wetland fauna. Therefore the design and construction had to ensure the balance of these valuable species was not disturbed. Contractors Ascon-Nuttal JV, were contracted to first build a temporary jetty that was used as a base from which the permanent bridge was built. This meant that no construction vehicles disturbed the marshland but instead travelled

along the jetty. The structure consists of a multi-span, high quality concrete box girder, (constructed by the incremental launch method and was externally pre-stressed) made up of two parallel structures one carrying north bound and the other south bound traffic. The two structures, 6.3m apart, enable natural light to filter between them to the wetlands and prevent shadows from affecting the plant life beneath. An elegant curved shape, the minimalist supporting piers and associated construction expertise ensured good integration into the landscape. The deck is approximately 12m above the estuary, high enough to be functional yet low enough not to obstruct shoreline views along the estuary. This is the first bridge of its kind built in Ireland and was opened to traffic by Fingal County Council/ NRA on time and budget in June 2003.

Building Category Winner | The Helix, Arts Centre



The Helix, Arts Centre was the winner in the 'Buildings' category. The project since inception, was intended by DCU to provide a new Centre for the Arts for the entire north Dublin area and was not strictly limited for use as a University conferencing facility. The originality and creativity demonstrated on its stage is also reflected in the design of the building itself. It houses a 1200 seat Concert Hall, a 450 seat theatre and an additional 'blackbox' theatre. The unusual design was developed by A&D Wejchert and O'Connor Sutton Cronin.

The building comprises of an insitu reinforced concrete frame with large volumetric space. The focal point of the building is the foyer, which is arranged over three levels, with stunning inclined concrete columns, which provides the orientation and direction via the Helix, which gives the centre its name. The main auditorium area required a column free space of 45m x 30m. Also, as it is on the flight path of Dublin Airport it was necessary for a full concrete roof to be provided for additional sound attenuation.

Elemental Category Winner | Cedar Brook Modern Housing development

The innovative precast system used at the Cedar Brook Modern Housing development in Cherry Orchard, was the winner of the 'Elemental' category. Dublin City Council commissioned the project, which was carried out by John Sisk & Son Ltd and Park Developments. The objective of the scheme was to provide modern affordable homes with close proximity to the City.



It was also a key requirement to provide a fast track solution. A precast concrete solution developed by the Concast Precast Group, facilitated the required fast-track on site programme by some 20%. The development comprises of a range of three and four-storey duplexes, apartments and two-storey houses. In Cedar Brook the architects have succeeded in producing a lively elevational treatment, particularly in relation to the four-storey apartments. This Project clearly demonstrates the contribution a well developed precast concrete system can make to meeting this demand

Sculpture Award | Agnes Conway Theatre



The jury for the 2003 Irish Concrete Society Sculpture award have unanimously selected 'Theatre' by Agnes Conway as the 2003 Award winner. The jury was very impressed with the evocative counter balance in the overall composition of the work. The quality of the concrete and casting is to a very high standard. The work is extremely well sited, both the awe and delight of walking through the work and interacting with it, will please and enthrall visitors to Birr Castle demesne.

Student Award | 'The Influence of Curing on the Performance of Slag Concretes.' - Patrick O'Connor & John Prendergast University College Dublin

This project studied the influence of curing on the performance of concrete, with a range of GGBS replacement levels, produced with Irish cement and aggregates. Experimental work was undertaken to assess compressive strength development, permeability, chloride ingress, and load-deflection characteristics. In each case, elements were cast with varying slag levels and given degrees of curing.