

Assignment Name: (Ref No 12) Foynes Flood Relief		Country: Ireland												
Location within Country: Foynes Co. Limerick		Professional Staff Provided by Firm: 22												
Name of Client: Limerick City & County Council		No. of Key Staff: 5												
Address: County Offices, Dooradoyle, Limerick		No. of Staff Months: 9												
Funding Agency: Office of Public Works		Overall project Value (in current Euro): €2,300,000												
Start Date: 08-2014	Completion Date: 12-2019	Approx. Value of Service (in current Euro): €290,000												
Name of Associated Firm (if any): JBA Consulting		No. of Months of Professional Staff Provided by Associated Firm: 2												
Name of senior professional staff of your firm involved and functions performed: <table border="1"> <thead> <tr> <th>Senior Staff</th> <th>Name</th> <th>Functions Performed</th> </tr> </thead> <tbody> <tr> <td>Project Director</td> <td>Jerry Cronin</td> <td>Client liaison and document review</td> </tr> <tr> <td>Project Manager</td> <td>Barry Dunphy</td> <td>Project team co-ordination, client liaison and document preparation, tender assessment, construction management</td> </tr> <tr> <td>Structural Design Engineer</td> <td>Mark Dignam</td> <td>Assessment of existing dykes and Design of tidal defence wall, including sheet piled solution proposed by contractor.</td> </tr> </tbody> </table>			Senior Staff	Name	Functions Performed	Project Director	Jerry Cronin	Client liaison and document review	Project Manager	Barry Dunphy	Project team co-ordination, client liaison and document preparation, tender assessment, construction management	Structural Design Engineer	Mark Dignam	Assessment of existing dykes and Design of tidal defence wall, including sheet piled solution proposed by contractor.
Senior Staff	Name	Functions Performed												
Project Director	Jerry Cronin	Client liaison and document review												
Project Manager	Barry Dunphy	Project team co-ordination, client liaison and document preparation, tender assessment, construction management												
Structural Design Engineer	Mark Dignam	Assessment of existing dykes and Design of tidal defence wall, including sheet piled solution proposed by contractor.												
Narrative Description of Project: The town of Foynes in Co. Limerick and Foynes Port experienced severe tidal flooding in the storm surges of January 2014 that affected large areas of the town leading to extensive damage and remediation costs. Following a detailed tidal and drainage assessment and review of existing flood defence measures that included the use of computer simulation model, a flood protection scheme of up to 200 year return period was developed. Nicholas O'Dwyer procured and supervised a full topographic survey of the study area together with site investigation works as well as invasive species management for Japanese knotweed identified on site. Part 8 Planning was sought and approved with the main elements of the scheme consisting of reinforced concrete wall along the old west quay, demountable barriers at the west jetty and at the West entrance to Shannon Foynes Port Company and a sheet-piled permanent tidal defence wall along the boundary of SFPC and the old Irish Rail site for up to 1km. Stakeholder consultations were key in this study comprising of local residents affected by the flooding.. Screening for appropriate assessment was carried out as the Port area lies within the Lower Shannon Estuary SAC. This required that construction activities along the quayside would have to prevent run-off from entering the dock during construction. A key programme risk was also identified where Japanese Knotweed invasive species was discovered along the route of the proposed defence wall. A Site investigation contract was procured to determine the ground conditions and utility services. Foyne port is on reclaimed land which, following SI results determined that sheet piling was the preferred option given the confined working space between the port and CIE lands and to provide sufficient bearing in the soft sandy soil. Several sections of the wall required demountable barriers to provide access through internal port roads and warehousing. Nicholas O'Dwyer completed the detailed design in June 2015 and the tender documents using the PWC CF3 forms of contract were prepared together with specifications and Pricing Document and the project was tendered in July 2015. Construction commenced in September 2016 and substantial completion was achieved in May 2017. The main elements of the scheme include: Reinforced concrete wall at the west quay; Demountable barriers at the west jetty and at the West entrance to Shannon Foynes Port Company; A sheet-piled permanent flood defence wall along the boundary of SFPC and the old Irish Rail site.														
Description of Actual Services Provided by Staff: - Design and Hydraulic Modelling - Options Assessment - PSDP - Project Management and Environmental Services - Procurement Surveys - Procurement and Supervision of Geophysical Surveys and Site Investigations - Cost Benefit and Detailed Design - Tender documentation preparation, Evaluation and procurement of works contractor - Construction Supervision - Contractor valuations and claims assessment														