

Achieving Minimal Environmental Impact for the Waterfront Development



CHALLENGE

A mixed-use development's design needed to account for the delicate balance of integrating new construction into an already dense urban environment. The proximity to the Liffey required careful consideration of environmental conditions, and the structural implications of building in such a location.

SOLUTION

AWN provided specialist assessments across key environmental areas, including air quality, climate, noise & vibration, and waste management, ensuring that potential impacts were identified, and appropriate mitigation measures were proposed.

RESULT

The collaborative work was successful in securing planning permission for the development. By addressing key environmental factors such as air quality, climate, noise & vibration, and waste management, AWN helped ensure that the project will be sustainable, with minimal impact on the surrounding environment.

APPLYING SPECIALIST ASSESSMENTS ACROSS ENVIRONMENTAL AREAS

Ronan Group Real Estate (RGRE), a valued client of AWN Consulting, a Trinity Consultants team, has secured planning permission for the residential phase of its Waterfront South Central development, a key mixed-use project set to transform the Dublin skyline. The development includes 550 apartments across three buildings, with a flagship 25-storey block set to become the tallest residential building in the Republic of Ireland upon completion. The site will also house three commercial blocks, including the new Citi corporate offices, already in advanced stages of construction.

This development represents one of the largest mixed-use projects in Dublin, contributing to the city's growing landscape and accommodating both residential and commercial needs. The residential towers will offer a range of world-class amenities, while the commercial space will provide modern office blocks designed to meet the demands of today's corporate occupiers.

CHALLENGE

The Waterfront South Central development site presented a unique set of challenges. Located in the heart of Dublin city centre, the site is constrained by its proximity to the River Liffey, surrounded by established neighbouring developments, and bordered by busy roads. This central location, while offering excellent connectivity and views, posed concerns related to the potential environmental impacts on local air quality, noise levels, and water management. Additionally, the project's design needed to account for the delicate balance of integrating new construction into an already dense urban environment. The proximity to the Liffey required careful consideration of environmental conditions, and the structural implications of building in such a location.

Furthermore, the height and scale of the development, particularly the 25-storey residential tower, added an extra layer of complexity in ensuring that the project did not negatively affect the surrounding areas or compromise the visual aesthetics of the area, which is characterised by a mix of historical and modern architecture.

SOLUTION

AWN played a pivotal role in addressing the environmental challenges of the Waterfront South Central development. We provided specialist assessments across key environmental areas, including air quality, climate, noise & vibration, and waste management, ensuring that potential impacts were identified, and appropriate mitigation measures were proposed.

- **Air Quality:** AWN conducted a detailed air quality assessment, analysing the potential impacts of both construction and operational phases. We provided mitigation strategies to reduce emissions and ensure compliance with local air quality standards.
- **Climate:** Our team carried out a climate assessment to evaluate the carbon footprint of the development. This included identifying strategies for enhancing energy efficiency and promoting sustainability, ensuring the project aligns with best practices in climate change mitigation.
- **Noise & Vibration:** We performed comprehensive noise and vibration studies to assess the impact of construction activities and operational noise on neighbouring properties and residents. Our recommendations included noise reduction measures and vibration control strategies to minimise disturbances.
- **Waste Management:** A sustainable waste management plan was developed to manage operational waste. This plan aimed to reduce waste generation, maximise recycling, and ensure that the development adhered to the highest environmental standards.

Additionally, AWN's expertise in environmental modelling and impact studies was crucial in providing the necessary data to support the planning application, ensuring that the development was appropriately designed to mitigate environmental impacts.

RESULT

The comprehensive environmental assessments and mitigation measures put forward by AWN were integral to the successful securing of planning permission for the development. Once completed, the 25-storey residential tower will become the tallest building in Ireland, while the development will also mark the completion of the final infill site on Dublin's North Quays.

By addressing key environmental factors such as air quality, climate, noise & vibration, and waste management, AWN contributed to ensuring that the project will be sustainable, with minimal impact on the surrounding environment. This permission marks a significant milestone in the development of Dublin's skyline and a key contribution to the city's ongoing urban regeneration, offering a balanced and environmentally responsible mixed-use development for future residents and businesses.

ABOUT TRINITY CONSULTANTS

Trinity Consultants, a leading global environmental consulting firm, provides services and solutions in the EHS Regulatory Compliance, Built Environment, Life Sciences, and Water & Ecology markets. Founded in 1974, Trinity has the technical expertise, industry depth, and capabilities to help clients achieve their goals across the natural and built environments.