

Project Title – Kirkcaldy Sea Walls, Fife

Year – 2014

Client – Fife Council

Main Contractor – Volker Stevin

Project Approx Value – £1.1Million

Project Aim

Extensive refurbishment and heightening works were carried out to the existing sea wall at Kirkcaldy in order to reduce coastal flooding of the promenade.

Contributions by Moore Concrete included the manufacture of bespoke seawall units, improved beach access ramps and steps; along with two new large ramps giving inclusive access to the beach and new promenade while maintaining the sea views and historic nature of the surrounding area.

Given the specific nature of the scheme, the project was faced with many unique challenges which had to be overcome during the manufacture of precast concrete units.

These include:

- a. The high quality finish required consistency of appearance when viewed along an extensive stretch of the units when in place.
- b. Careful manufacture, transit and offloading procedures to avoid damage to unit edges, which would result in inferior finished appearance.
- c. A range of differing unit types, and hence bespoke moulds.
- d. Specific concrete mix abrasion resistance and suitability given the nature of the marine environment

In total 1036 units were supplied to the scheme. Each individual unit was inspected and tested for conformity to the specification for both the concrete properties and the finished product geometry. The particular emphasis on conformity and demanding specification for the works ensured a design life conformity to the required XS3 exposure class.

The ability to resist freeze thaw degeneration and chemical corrosion was critical for the success of the precast units in the demanding marine environment.

Completed in November 2014, and costing just over £9 million, the upgraded sea wall and refurbished promenade now provides resilient coast defence. In July 2015 Volker Stevin Ltd won the Integrated Transport Project of the Year at the Scottish Transport Awards. The area is now a shared space for locals and visitors with improved connections to the town centre and safer walking/cycling paths.



