

Collaroy Beach Stormwater Outlet



New stormwater outlet improves drainage and reduces flooding risk

Waeger Precast has manufactured a new stormwater outlet for Collaroy Beach, in Sydney's northern beaches.

The previous Collaroy Beach pipe was built in the 1970s, and over the years had been damaged by waves. After community consultation, the local Warringah Council decided to replace the existing structure in the same location. Part of the brief was that any visible portions of the concrete outlet be compatible with the beach environment, subject to technical and practicality considerations.

The replacement unit manufactured by Waeger improves drainage in some Collaroy streets by increasing the amount of water that can be carried. It plays an important role to reduce any risk of flooding.

The new outlet is 2.1 metres in diameter and approximately 10 metres shorter than the original. The design includes a 3m² surcharge structure, 34 metres from the sea wall. This structure allows drainage under extreme rainfall conditions and high sea levels.

Waeger made two new units for the outlet, the larger one 50 tonne and the smaller unit, 30 tonne. Both units were cast using a marine grade concrete with coloured oxide, with all reinforcement galvanised. speaks for itself?"

Installation was carried out over summer months to take advantage of better construction conditions for the works, with an extended beach sand profile and generally small wave conditions.

The new outlet was installed next to the current structure, which has subsequently been removed.

As per the project specifications, most of the structure will ordinarily be covered with sand, and the section that is visible is a narrower shape, to minimise any impact of waves.