

The Advantages Of Precast Concrete Wingwall Units

Precast concrete products offer many known advantages and Rocla's precast concrete wingwall units are no exception. Wingwall units are used at both the inlet and outlet of a pipe system in both culvert and stormwater applications. Precast wingwall units offer the client a faster installation time, reduced material usage and no site-mix concrete or reinforcing on site resulting in project cost efficiencies.

The natural flow path of water upstream of a construction is wider than the culvert or pipe structure. Therefore, transition sections are required to receive and direct the flow of this upstream water through the culvert/pipe, this is also true of the downstream end of the culvert/pipe where the flow of water is to be returned to the natural width of the stream. Where water velocities reach up to 4m/s and above, the precast concrete wingwall unit is the most effective structure to use for the effective transfer of this water.

In stormwater applications the primary focus is to direct water into a flow path that results in the least amount of turbulence which optimises the hydraulic capacity of the conduit. The wingwall portion directs the water, whilst the wingwall, floor slab and toe provides protection for the embankment and surrounds against scouring and possible collapse.

Rocla's precast concrete wingwall units offer:

- Fast and easy installation
- Reduction in quantity of materials required
 - No waste and no clean up required
 - No formwork
- Making remotely located sites simpler to manage
 - Concrete strength is guaranteed
- Quantity and positioning of designed reinforcing is guaranteed
- No curing of concrete or formwork stripping required – saving time
- Units capable of fitting a wide range of pipe diameters and culvert sections
 - Lifting anchors cast into the structure

“We believe that the time and cost savings associated with the utilisation of precast concrete wingwall units can be enormous for infrastructure-related projects. The full range of wingwalls can be manufactured at all Rocla factories nationwide, optimising transportation costs. Rocla is well known for its manufacturing capabilities and quality standards in addition to its technical team available to assist with technical support required by the customer” said Justin Kretzmar, Rocla's Sales Engineer.

Rocla has been supplying precast concrete products to most of the major infrastructure projects in South Africa, Mozambique, Namibia and Botswana. Rocla's entire product offering is manufactured to the ISO 9001:2008 standard at various plants throughout South Africa, Namibia and Botswana.

Rocla is part of the IS Group of companies which includes Technicrete and Ocon Brick.

Further information is available from: Malebusa Sebatane, Group Marketing and Communications Manager, the IS Group Tel: 011 670 7600 Cell: 078 803 9863 email: malebusa.sebatane@isgroup.co.za