



Fishwater Flats WWTW NMBM

Project:	FISH WATER FLATS WWTW
Client:	NELSON MANDELA BAY MUNICIPALITY
Contact:	SSI NMB Port Elizabeth
Project value:	R 1, 5 B
Start date:	February 2010
End date:	February 2012

SERVICES PROVIDED:

- B&S: Architectural and Structural engineering expertise
 - Conceptual design
 - Design Development
 - Visual impact studies for the approval
 - Sustainable design input
- Water Sector: Civil and Process engineering
 - MBR reactors
 - Design of new inlet works
 - Pump stations and storage dams

PROJECT DESCRIPTION

The Waste Water Treatment Works, currently treating 80% of the city's sewerage and waste water is to be refurbished, extended to and upgraded substantially.

The project will be sustainable in the following ways:

- Biogas Co-generation Plant to provide energy for the plant and for the wider industries.
- Dual stream water: water recycled from the plant after being processed will be available for Industrial and irrigation use.
- Water-harmonics dam system is placed as indigenous wetland and encouraging bird life with reed-filtering in dams with various heights of water-flow.

The new WWTW will be a world-class facility with a multi-purpose Entrance Building including Offices, Training facilities, Laboratories and Staff Canteens and cloakrooms

New inlet works in enclosed building and passive solar facades with clearstory windows providing lot of natural light.

Buildings to become obsolete from previous WWT plant to be demolished will have demolished concrete crushed and the crushed rubble will be used as aggregate for the new concrete structures and fill under new roads for sub-base material.

The WWTW will provide usable recycled water for industrial use and irrigation and this 'dual-stream' intervention will alleviate the current water shortages due to droughts and low-water levels of dams in the Nelson Mandela Bay/ Port Elizabeth area.



ENGINEERS AND ENVIRONMENTAL CONSULTANTS

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