



PROJECT: ORANGE GROVE STORMWATER DESIGN
LOCATION: ORANGE GROVE, TRINIDAD
OWNER: The University of the West Indies
CLIENT: Facilities Management Division, UWI
SECTOR: INFRASTRUCTURE
PROJECT VALUE: TT\$9.5m
PROJECT COMPLETION: Apr 2013



Project Description

This project entailed the analysis and design of a comprehensive stormwater management system for a new 80ha (200 acres) mixed development site for institutional use. The system was designed to incorporate runoff from a mix of housing, commercial, agricultural and educational development. The perennial flooding problem experienced at this site and the anticipated use of the land prompted the Client to carry out a detailed study of the site and catchment which included the design calculations for stormwater channels, detention pond system and catchment performance during rainfall events.

Our role

The overall scope of our responsibility under this project was as follows:

- Carry out a desk study to understand the history and surrounding nature of the site.
- Undertake a detailed topographic survey of the main site and bordering watercourses.
- Carry out an analysis of the catchments to understand the runoff characteristics
- Model the performance of the catchment for specified rainfall events
- Work with statutory guidelines and data (Ministry of Works, Water Resources Agency) for ratification of design parameters
- Develop detailed calculations, designs and drawings to enable construction works to commence
- Produce a technical report on the adequacy of the entire system under a 1:50 storm event.

