Abstract

The thesis is a response to the crucial water shortage problem in Singapore. The project aims to bring about a greater environmental awareness, especially water conservation to the general public and to experiment in the provision of an alternative source of water supply.

The design vehicle is a demonstrative water treatment work which recycles the residential sewage water using an ecological method. The proposed project is to be sited along a park connector in Tampines, utilising the existing canal resource and complimenting the context with nature such as plants and waterscapes.

The thesis seeks to investigate how we could harmonise the biological phenomena of nature with the modern technology in solving an environmental problem. The architecture would readdress both the technological and aesthetic issues of water reclamation to illustrate our interdependency relationship with nature. At the same time, the programme would encompass the social concern in heightening the public's ecological awareness, through sensual and educational architectural experiences.

The emphasis of the scheme is in showcasing and experiencing the various biological filtration processes. The fundamental intention is to create a revealing and inviting environment to introduce and enlighten the public's environmental awareness. The design strategy uses porosity and lightness to disclose the activities within so as to break down the psychological barrier of the people to sewage recycling and draws visitors into an interactive realm of natural water treatment process. The series of filtration elements will complement the waterscape and inject a unique imagery to the environment.