

# simplygreen

Summer 2008

www.slainc.ca

## A Garden For The 21st Century!

### *Vandusen Botanical Garden*

Vancouver's premier show garden, is getting a 32 million dollar facelift. With our planet teetering the brink of irreversible ecological disaster – we need to seek practical and innovative ways to coexist as well as repair nature. Demonstration and education is integral to getting this message through.

The first phase of the 22 hectare garden at the corner of 37<sup>th</sup> and Oak Street will respond to these challenges and redefine the function, aesthetics and role of botanical gardens in the 21st century.

### **Living Building**

Inspired by our native Orchid, the new building is shaped with a stylish petal-shaped roof which will house new state-of-the-art administration and education centre. S.L.A. has just completed the first phase of the project design with the offices of Cornelia Hahn and the architectural firm of Busby Perkins + Will to create a building and landscape which functions as one living system.

### **Beyond 'Sustainability'**

S.L.A. inc. believes that our society needs to move quickly beyond the belief that we need to 'just' achieve

a balance between the natural and the built environments - in other words 'Sustainability' is no longer the 'Status Quo.' We must reverse the trend of land degradation and invite nature's functions into a healthy interface with our society. We must seek to create 'Regenerative Solutions' that create a net benefit to our environment and planet. For this we look to nature - because for us "Nature is the Best Designer We Know"

rain channels that emulate dendritic arms of a river course. This will direct stormwater from the existing parking lot and adjacent 37<sup>th</sup> Ave

into a series of demonstration gardens illustrating how water is cleaned using plants such as Juncus, Iris and Carex.

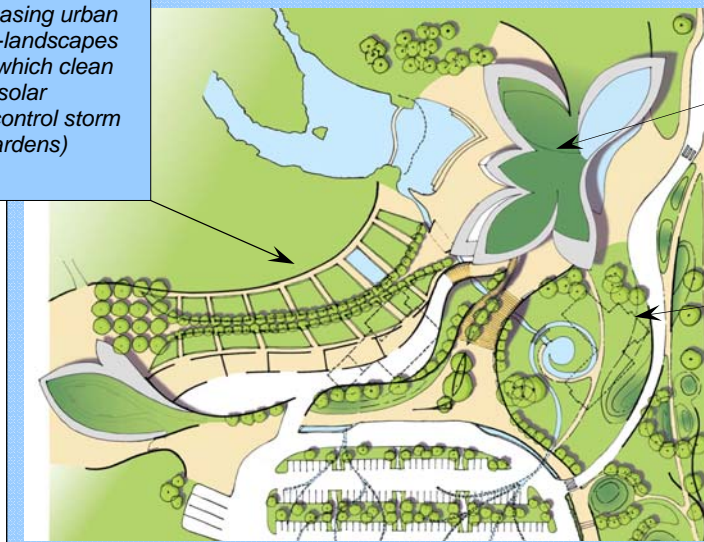
These gardens are part of a larger demonstration and education facility for the public and will show case landscape solutions such as rain gardens and wetland systems

A solar aquatic system (water plants housed in a greenhouse) will be supplement

### The Design for Interfacing Landscape & Building

Illustration: Busby Perkins + Will

A series of demonstration gardens show casing urban agriculture, eco-landscapes and landscape which clean grey water (i.e. solar aquatics), and control storm water (i.e. raingardens)



Living Building – A series of ecological zones (i.e. meadow, wetland) will illustrate ways in which water is captured, cleaned and reused

The entry gardens designed as a series of intertwining serpentine berms illustrate the pine forest ecology of interior coastal B.C.

Stormwater is collected from the parking lot and 37<sup>th</sup> Ave via channels which emulate dendritic arms of a river.

this process of grey water

### **Regenerative Solutions**

Part of this plan is for 100% of VanDusen's occupants' water use to come from either captured rain or reused water that is purified without the use of chemicals.

For example we're illustrating – in an abstract way – how storm- water falls, runs-off and infiltrates by using

cleaning.

The undulating five-petal 'green' roof accessible by people will showcase a series of ecological zones – from butterfly meadows to wetlands.

This system is part of a larger network within the garden. The existing network of ponds will be

# simplygreen (continued)

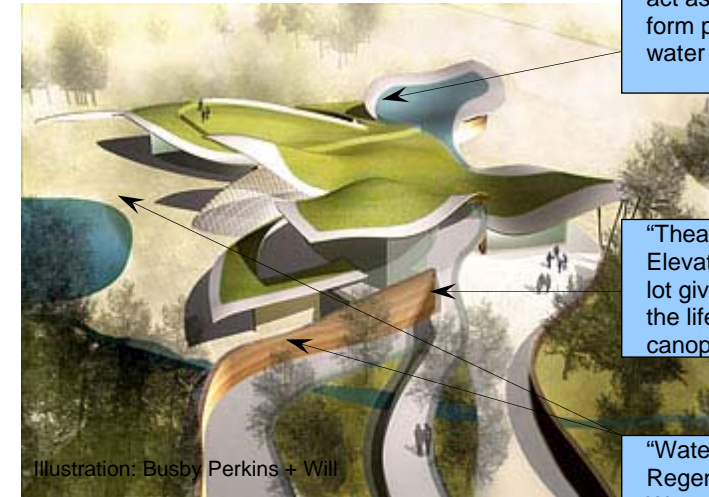
partially reinstated wetlands to receive, use and process water as part of its natural system.

## The Garden As Art

The entry gardens designed as a series of intertwining serpentine berms illustrate the pine forest ecology of interior coastal B.C. The minimalist treatment of the landscape coupled with these forms harken to the undulating mountain ranges of the pine forest and the landscape itself transcends to that of public art.

## The Garden As Educator

In addition to the gardens which demonstrate storm water management, gardens featuring principals of urban gardening including composting, high intensity agriculture will illustrate how people can integrate simple techniques into



Portions of the green roof will act as collector of water and form part of the system for water reuse on site.

“Theatre Through the Trees” Elevated catwalk from parking lot gives users a glimpse into the life of trees in their upper canopies

“Water Canal and Wetland Regeneration” Water taken from urban areas streets, parking will be taken and cleaned through a series of canals and ponds through the gardens

their own gardens or patios. Eco-gardens – such as native landscapes, butterfly and wildlife gardens will also educate the public on the process of nature and illustrate how these principals can be used in their own Backyard.

For more information

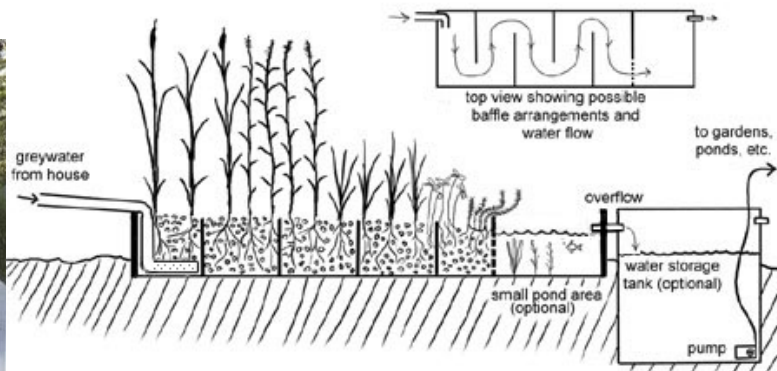
Vandusen website:

## Keeping it 'Simple, Low Tech + Cost Effective

### Grey water Treatment and Plants

Greywater systems take non-fecal water from showers, bathtubs, sinks, washers and dishwashers and reuse that water for irrigation, cooling devices and in some cases toilet water.

One type of a gray water system is called a **pass through system**. *One Example of this System Subsurface Flow Constructed Wetlands:* this system consists of aquatic plants in a wet substrate, usually gravel. Keeping the water below the surface of the gravel medium is ideal for this type of system, especially if used in a residential setting, as it helps to keep any odor down, there is less human contact, faster treatment of the water (more contact with roots and gravel), and is less likely to freeze.



Grey Water Treatment Could be Functional as well as Aesthetic