

VANDUSEN BOTANICAL GARDEN

Vancouver Board of Parks and Recreation
Committee Meeting May 14, 2009

Living Building Challenge



FLOWER AS METAPHOR

- Rooted in place and yet...
- harvests all its own energy + water
- is adapted to climate + site
- operates pollution free
- promotes health + well-being
- comprised of integrated systems
- is beautiful

Six Petals

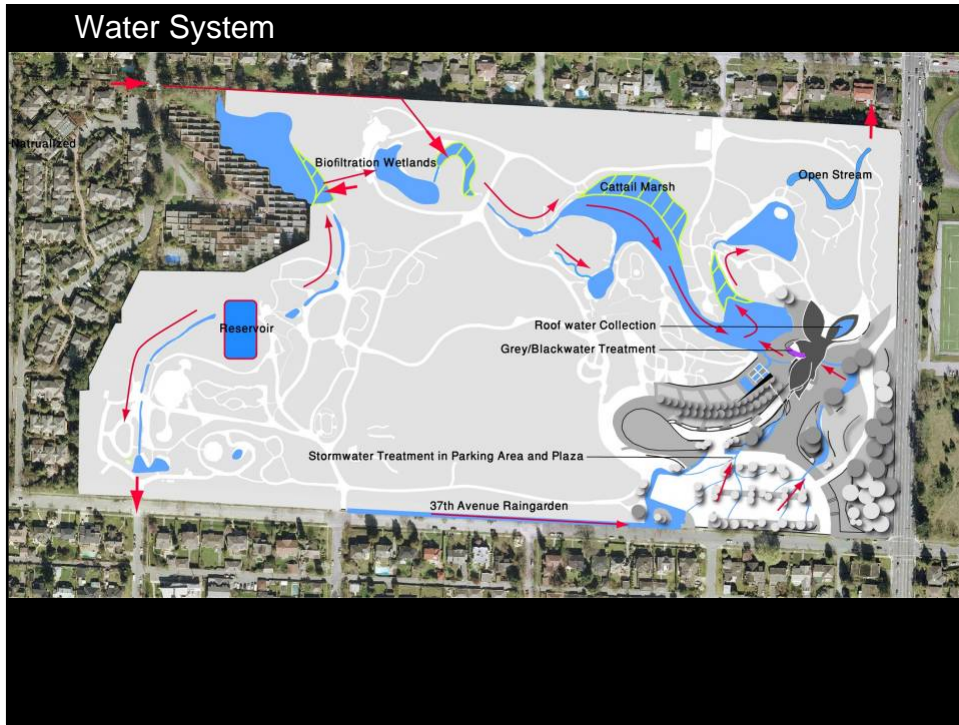
Site
Energy
Materials
Water
Indoor Quality
Beauty + Inspiration

Natural Systems



Forest System





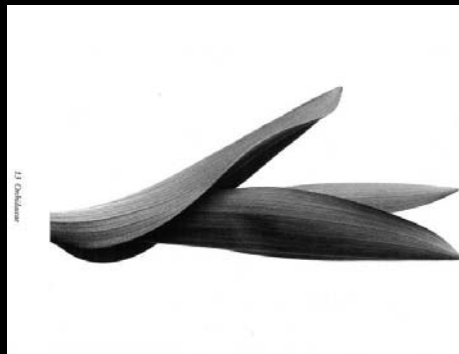
VanDusen Design Goals

	GOALS BY PRIORITY BASED ON CHARETTE - 01.23.2007		CATEGORY			
	EDUCATION	DEMONSTRATION	PERFORMANCE	IDENTITY		
Implement best practices around conservation and sustainability						
Reach a natural balance whereby VanDusen is self-sufficient						
Make VanDusen one of the foremost visitor sites in Vancouver						
Teach/educate botanical and ecological excellence						
Offer formal/informal and active/passive learning experiences						
Explore the relationship between buildings and ecological systems						
Create an image/sense of VanDusen as being a public space						
Move toward urban self-sufficiency for food						
Design to meet the 2050 Challenge						
Aim to attract at least 300,000 visitors annually						
Celebrate the important role of plants within the earth's systems						
Create a strong brand based on education and demonstration						
Offer continuing education that appeals to all age/experiences						
Create a facility attractive to all cultural groups/ages						
Reinforce the ecological footprint and reduce its over time						
Connect to the community and surrounding neighbourhood						
Showcase 2050 performance						
Design to local climatic conditions						
Design for experiences in all seasons/seasons						

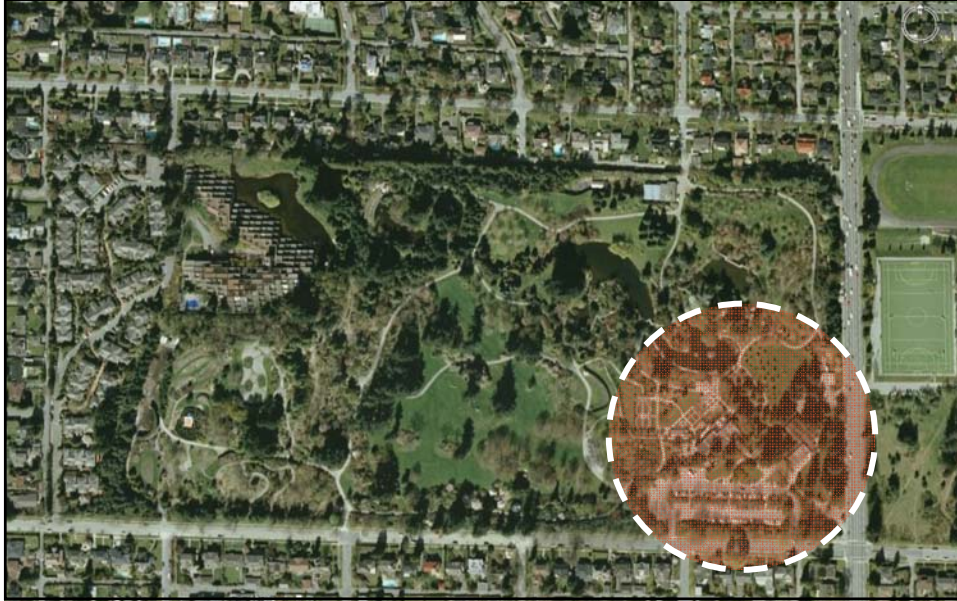
VanDusen Design Goals

IDENTITY

- Make VanDusen one of the foremost visitor sites in Vancouver
- Create an image/sense of VanDusen as being part of public realm
- Aim to attract at least 300,000 visitors annually

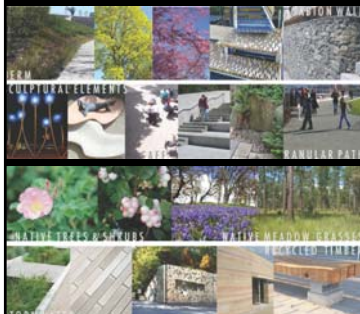


Project Scope

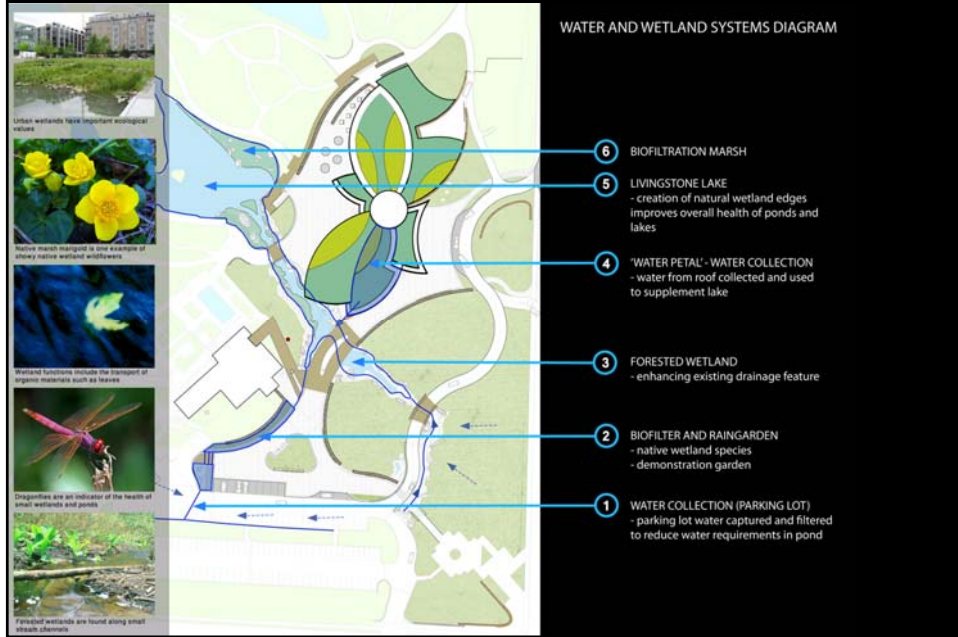


Site Master Plan

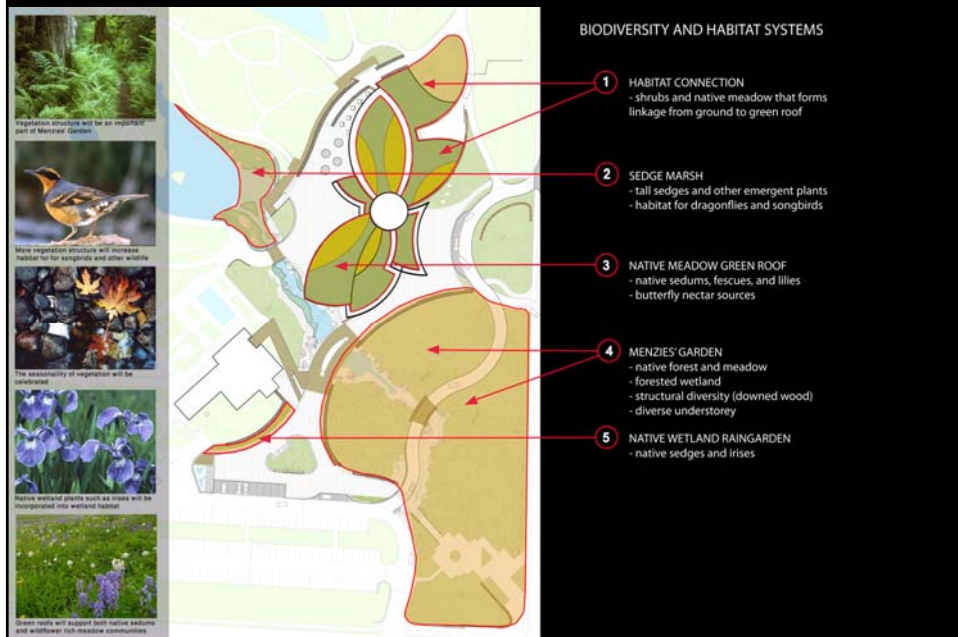
1. MENZIES GARDEN
2. PARK DRIVE
3. STREAM
4. KATSURA GARDEN PLAZA
5. RAIN GARDEN
6. BUS PARKING
7. SERVICE
8. BRIDGE
9. LIVINGSTONE PLAZA
10. VANDUSEN VISITOR CENTRE PLAZA
11. CAFE
12. OUTDOOR EDUCATION
13. BOARDWALK
14. AMELANCHIER GROVE
15. VIEW TERRACE
16. GREEN ROOF
17. RAINWATER COLLECTION PETAL
18. EXIT TO OAK STREET



Water & Wetland Systems Diagram



Biodiversity and Habitat Systems



Ground Floor Plan

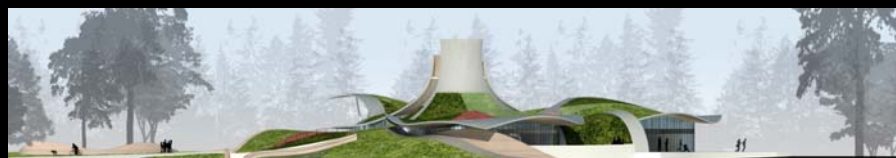
1. COVERED OUTDOOR PLAZA
2. ARRIVAL HALL
3. RECEPTION
4. ATRIUM
5. GREAT HALL
6. CLASSROOM / LECTURE / MEETING ROOM 1
7. CLASSROOM / LECTURE / MEETING ROOM 2
8. CASUAL DINING
9. TODDLER ROOM
10. CHILDRENS HANDS-ON LEARNING ROOM
11. ADULT EDUCATION / DEMONSTRATION ROOM
12. VOLUNTEER LOUNGE
13. LIBRARY
14. CURATORIAL WORKROOM
15. SHOP STORAGE
16. GARDEN SHOP
17. COVERED OUTDOOR GARDEN SHOP
18. SERVICE AREA
19. LOADING ACCESS



Elevations



EAST



NORTH

Elevations



WEST



SOUTH

Sections

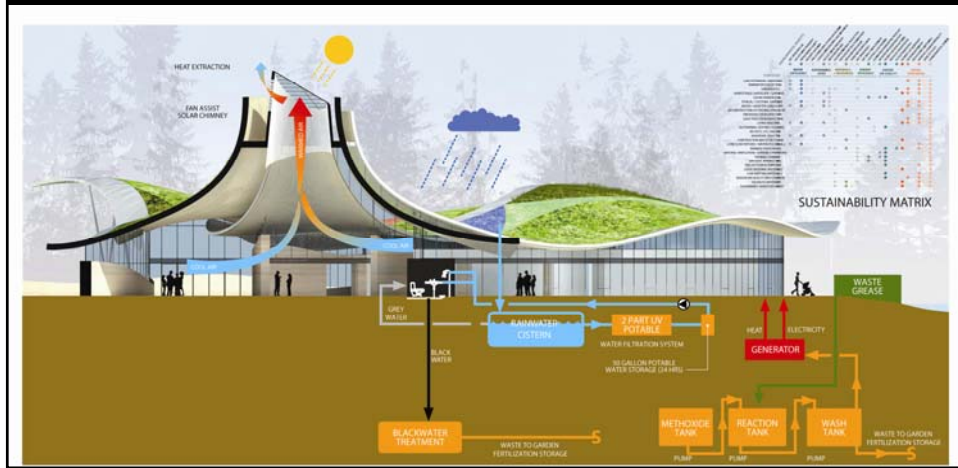


VIEW TO SOUTH

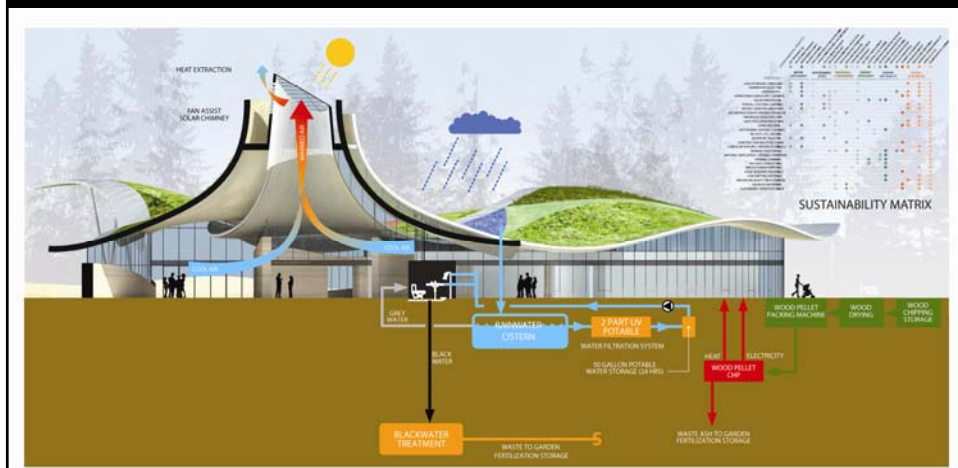


VIEW TO NORTH

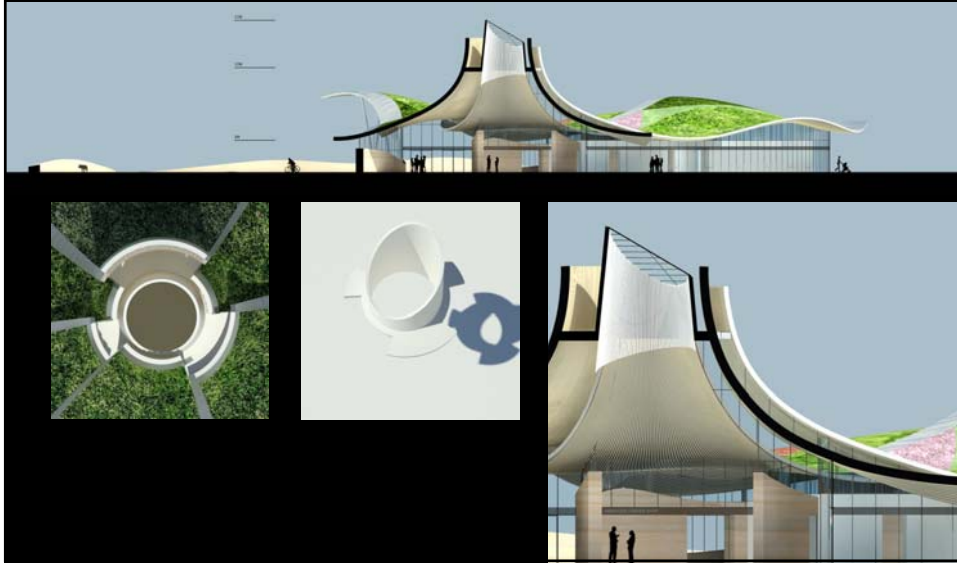
Biodiesel Diagram



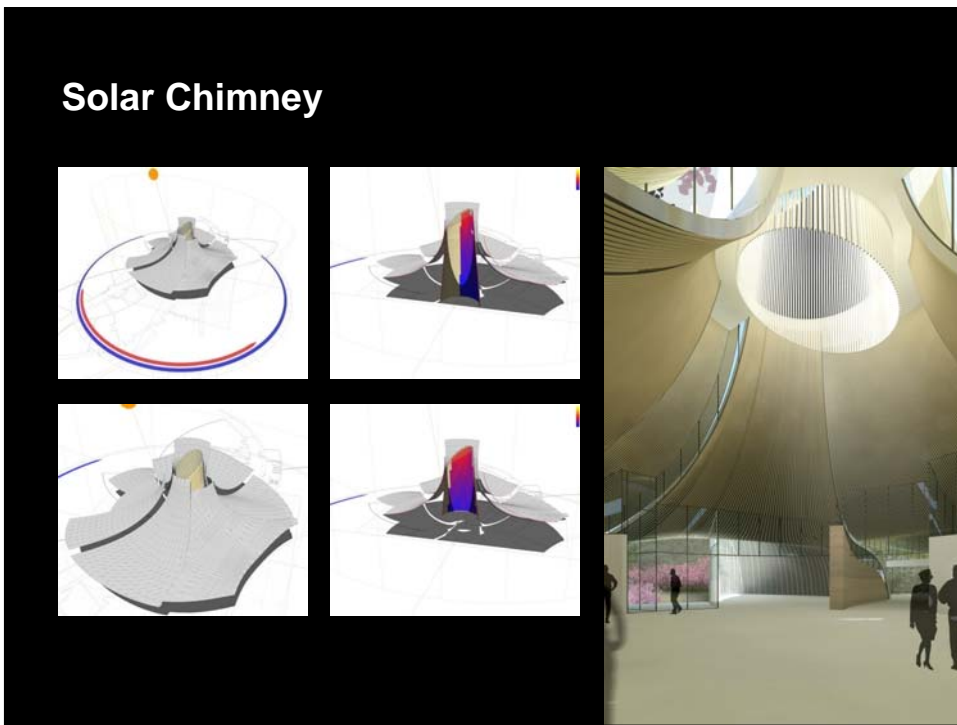
Wood Pellet CHP Diagram



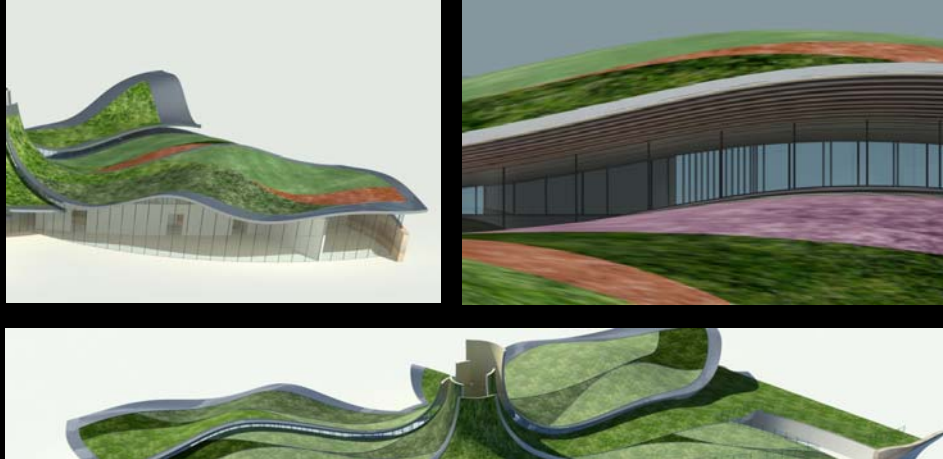
Solar Chimney



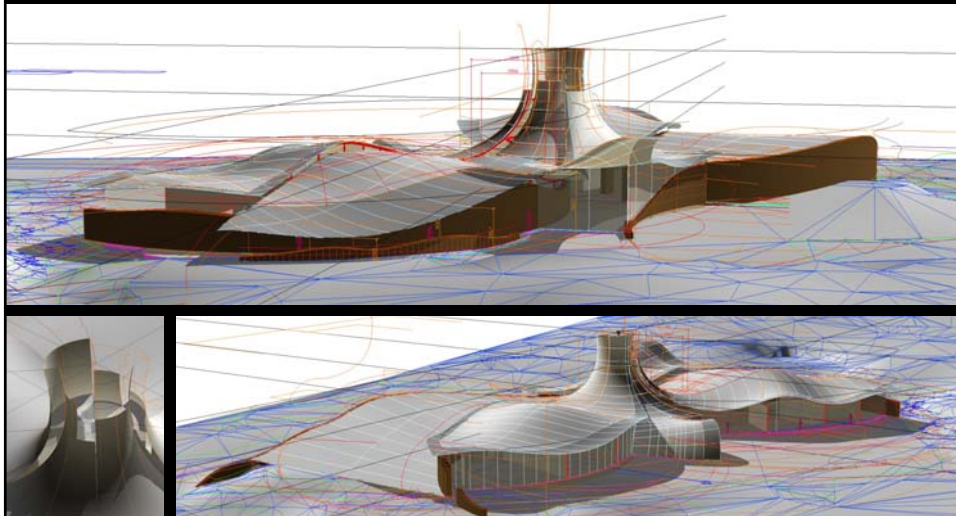
Solar Chimney



Roof Garden



Process – 3D Modeling



Perspectives



Perspectives



Perspectives

