SOLAR ICE PAVILION

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CONCEPT

Create a **juxtaposition** between the reality of our current melting planet and the **potential for a healthy future** through the demonstration of sustainable technology.

PURPOSE

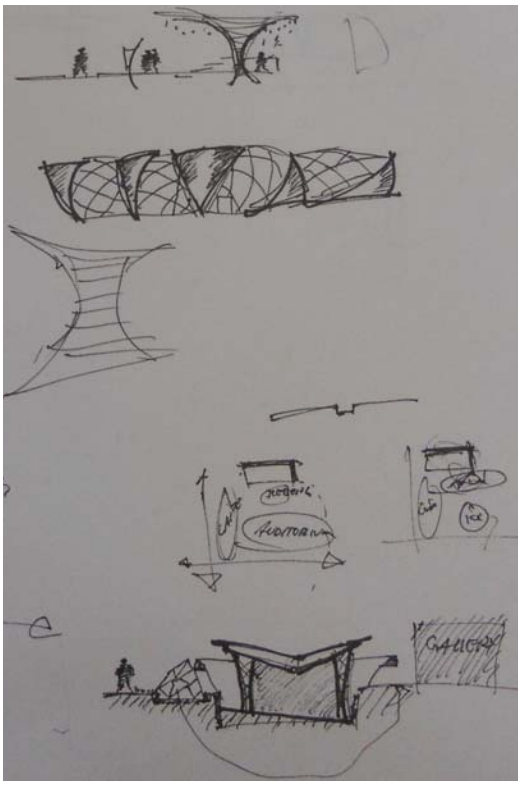
Create **interactive** micro-climate with use of ice

Display human **impact** with the ice cap

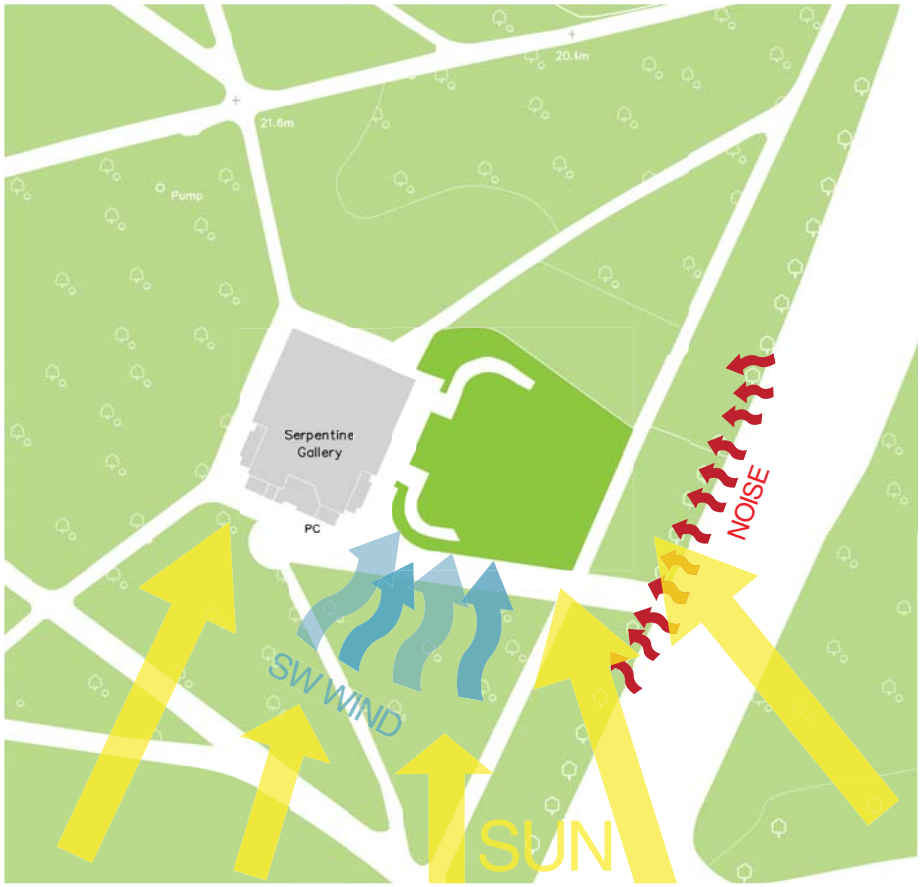
Use site to **educate** visitors on global warming

Promote **sustainability** by using and recyclying materials and systems

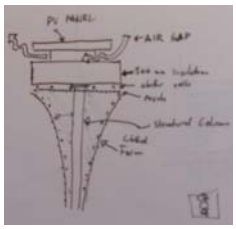
APPROACH

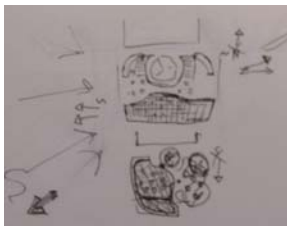


ANALYSIS



PROCESS





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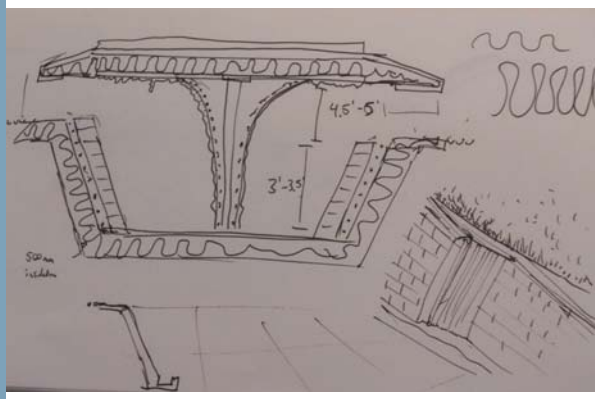
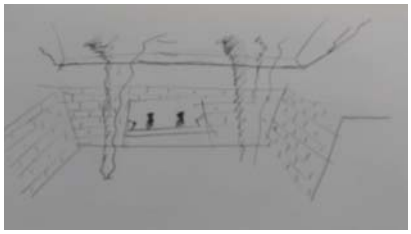
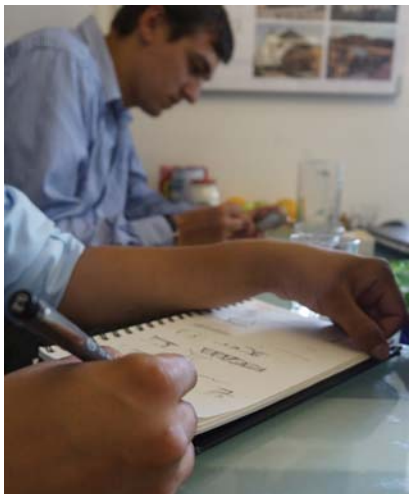
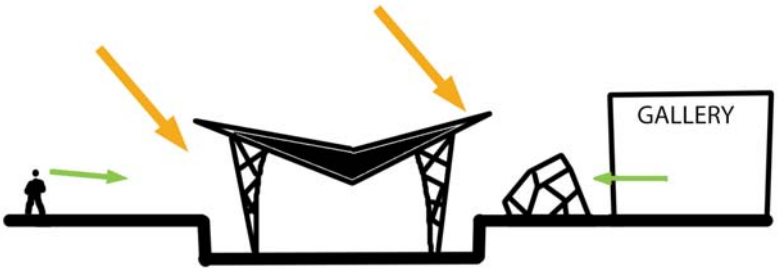




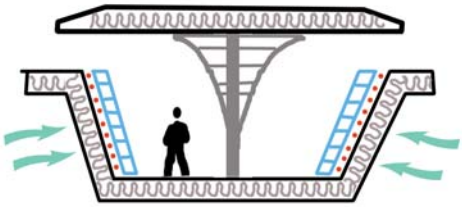


GOALS

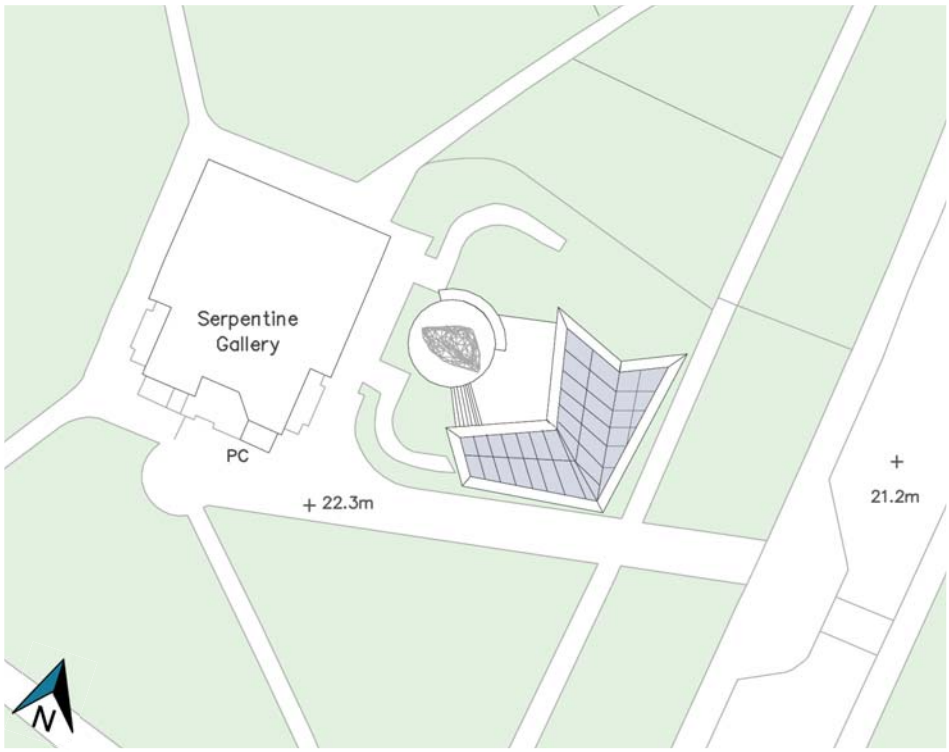


Important factors on the site to consider that affect our design include the **visibility** from the human level from the entrance just south of the site which also includes vehicular traffic. The level of the canopy should allow drawing interest into the area and draw people into the buried space. The use of actual ice within the pavilion will affect how much **sun penetration** we want to enter the interior space. The rate of melting during the day may also be mitigated by providing shelter for the iceberg to the north. The iceberg is located between the proposed pavilion and the existing gallery to provide a **connection of the two** spaces. From the inside, the patron is able to look out and see the ice and the pavilion.

To help preserve the ice inside the pavilion under colder temperature, the base of the pavilion will be placed **4' beneath** the surface. The walls will be super **insulated** as well to help keep most of the cold air in and warmer air out. The ice walls will be built up of **ice blocks** that will be supported by **glycol chilled coils** that allow the transfer of below-freezing water to also be used on the column structure that will create a **web** of ice

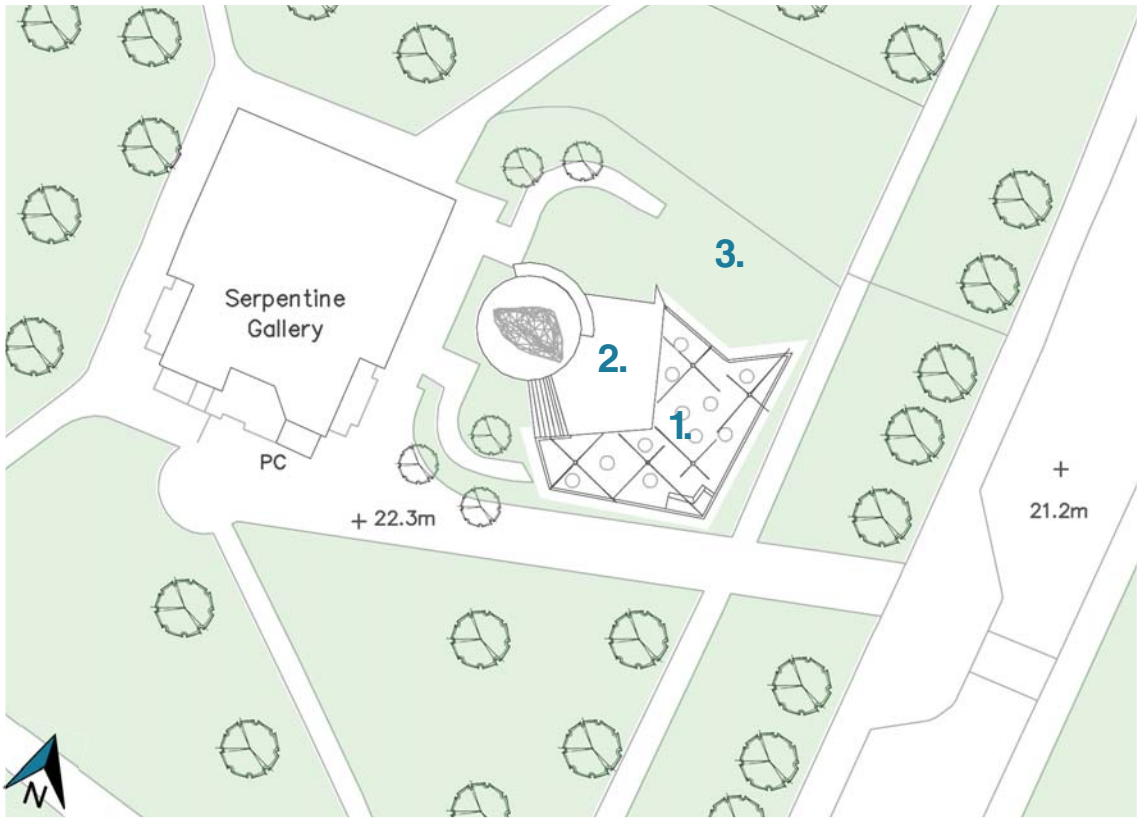


SITE PLAN

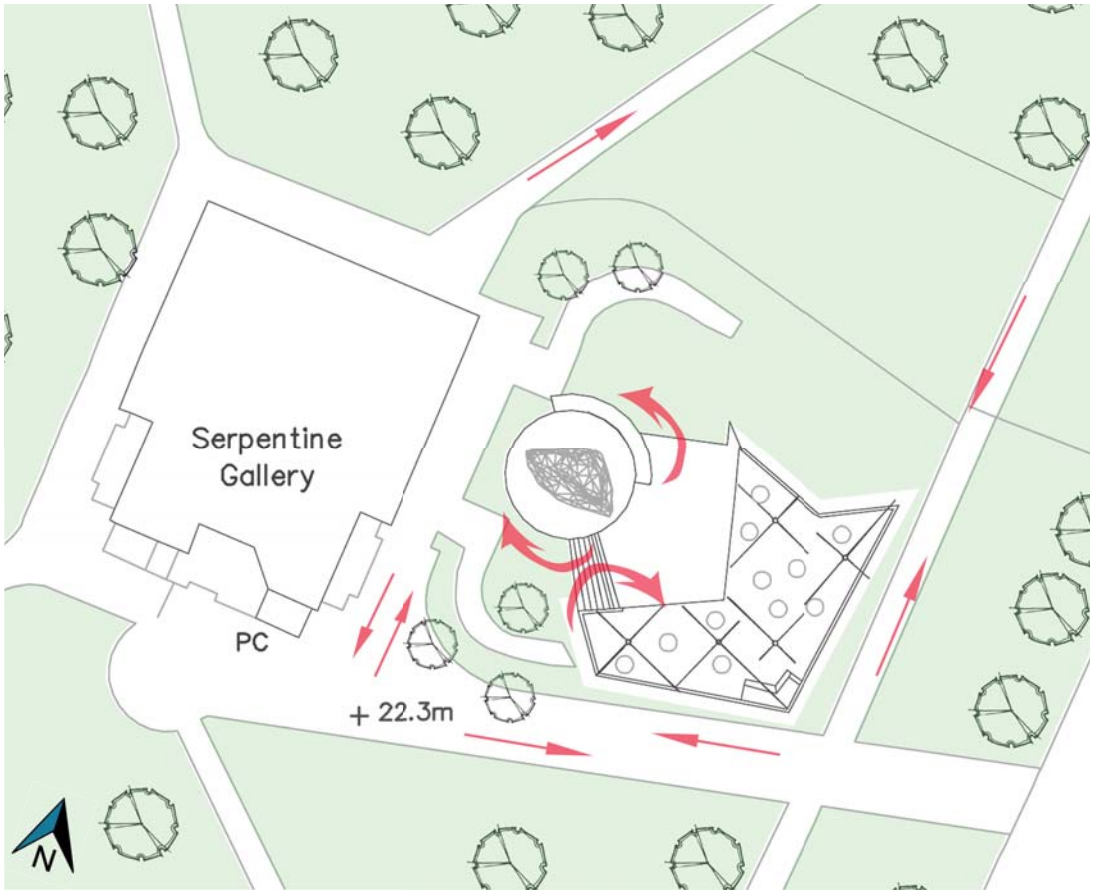


FLOOR PLAN

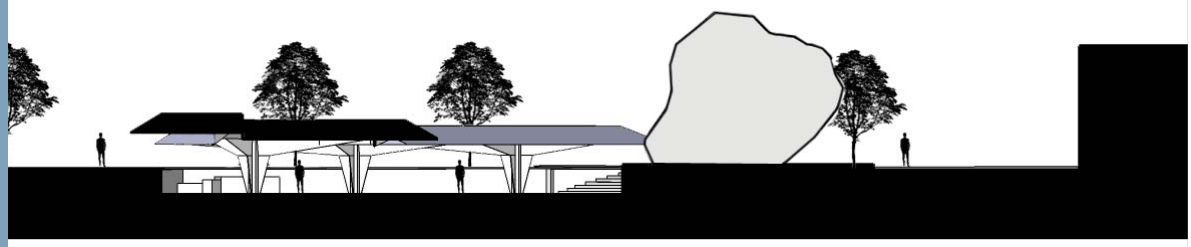
1. Cafe and Seating **2.** Open Air Seating **3.** Outdoor Gathering



FLOOR PLAN CIRCULATION



SECTION



INTERIOR RENDER

EXTERIOR RENDER

THE CHECKLIST

Regeneration-Based Checklist for Carbon-Neutral, Zero Net Energy Design and Construction

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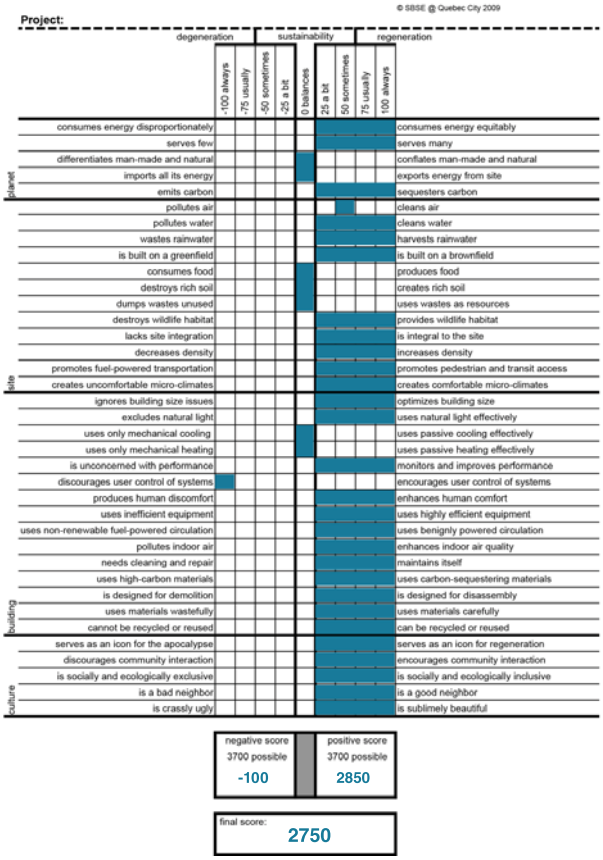
Project:



negative score	positive score
3700 possible	3700 possible
-100	2850

final score: **2750**