# **Grandview Heights Aquatic Centre** Surrey BC, Canada

Grandview Heights Aquatic Centre contains recreational and world-class Olympic pool facilities beneath the world's longest span timber catenary roof system.

The City's desire for an "iconic" destination pool to entice families, athletes and international competitions drove the design for Grandview Heights Aquatic Centre.

Through close collaboration with the client and diverse user groups, we arrived at a design that maximized glazing towards the street, activating the project edge and blurring lines between interior and exterior spaces.

ANA C











#### Site Context

The site is located in Surrey, BC, Canada, the second largest city in the province. As one of the fastest growing cities in the region, public facilities are facing increasing demand.

The City of Surrey initiated a master planning study which consists of staged rezoning and redevelopment of the area to include a mix of low and medium density housing, enhanced road networks, pedestrian and bicycle routes, and the development of public facilities that will serve as civic nodes to support growing communities. Grandview Heights Aquatic Centre is the first stage in the realization of this master plan.



## Main Level Plan

ВШ

1	Lobby	10 Hot Tub
2	Viewing Area	11 Lap Pool
3	Administration	12 Sauna
4	Cafe	13 Steam
5	Classroom	14 Retractable Seating
6	Universal Change	15 Storage
7	Women's Change	16 Water Slide
8	Men's Change	17 Spring boards
9	Leisure Pool	18 Dive Tower

01





## Second Level Plan

вL

- Fitness
  Lobby
  Lobby (open to below)
  Mechanical
  Seating
  Timing Room
  Dive Tower
  Water Slide

15m





















## **Volumetric Efficiency**

Apart from the material efficiency of the roof structure, the building volume created by the suspended roof is 20% less than that of the truss roof, making it that much more efficient to heat and cool.



Section A



Section B

Because the roof is hanging in suspension, its structure allows for a certain amount of deflection under snow loads and wind uplift.

