

THE HEARN POWER STATION

TORONTO, ON, CANADA, 2007

Client

Suntower Developments Limited

Architect

Behnisch Architekten, Los Angeles in cooperation with Greenberg Consultants, Consulting Architect MVVA, Landscape Architects Arup, Structures and MEP Transsolar, Climate Engineer ERA Architects, Master Plan Consultant

Transformation Study

2007

Gross

 $100.060\,m^2\,/\,1,\!080,\!000\,sq.ft.$

Address

Port Lands

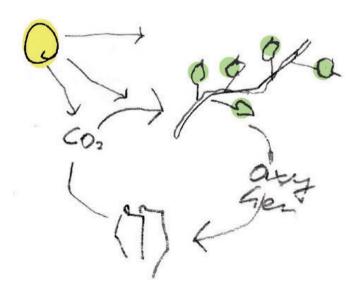
Toronto, Ontario, CA

With the goal of countering urban sprawl and encouraging inner city growth, the Toronto Waterfront Revitalization Corporation coordinated a redevelopment plan for a significant segment of waterfront in downtown Toronto. The mission is to develop a series of sustainable, mixed-use, urban precincts integrated with parks, institutions, and open space. As part of the master plan, the re-use of the Hearn Power Station will stimulate the development of emerging neighborhoods by housing a new satellite campus for a School of Computing and Engineering that includes community recreational facilities. The Hearn Power Station is a decommissioned power plant characterized by its single 215 m (2000 ft) high stack. It is located in the

Toronto periphery, adjacent to the emerging Port Lands Development and Lake Ontario Park. After scrutinizing the Hearn's existing structural and organizational characteristics, the building revealed inherently rich spatial qualities. The large volumetric footprints, which housed its enormous equipment, left eight 42 m (130 ft) tall casted atria spaces that have been reprogrammed into a School for Computing and Engineering. These volumes naturally create bright enlivened areas for student life with adjacent spaces used for testing labs, classrooms and lecture halls. The long coal hopper, a two-story circulation spine used to transport the coal that fed these engines now functions as a highly programmed social thoroughfare connecting



the eight vertical volumes. Adjacent to the new School for Computing and Engineering is the turbine hall. The long uninterrupted space is easily imagined to be a recreational facility that can house multiple ice rinks. The re-use concept is based on the idea of a house within a house. The overall existing exterior envelope provides the outer skin of a semi-conditioned space which includes the atria. The primary enclosure is structured inside the Hearn's existing armature and fully conditions the new education spaces.

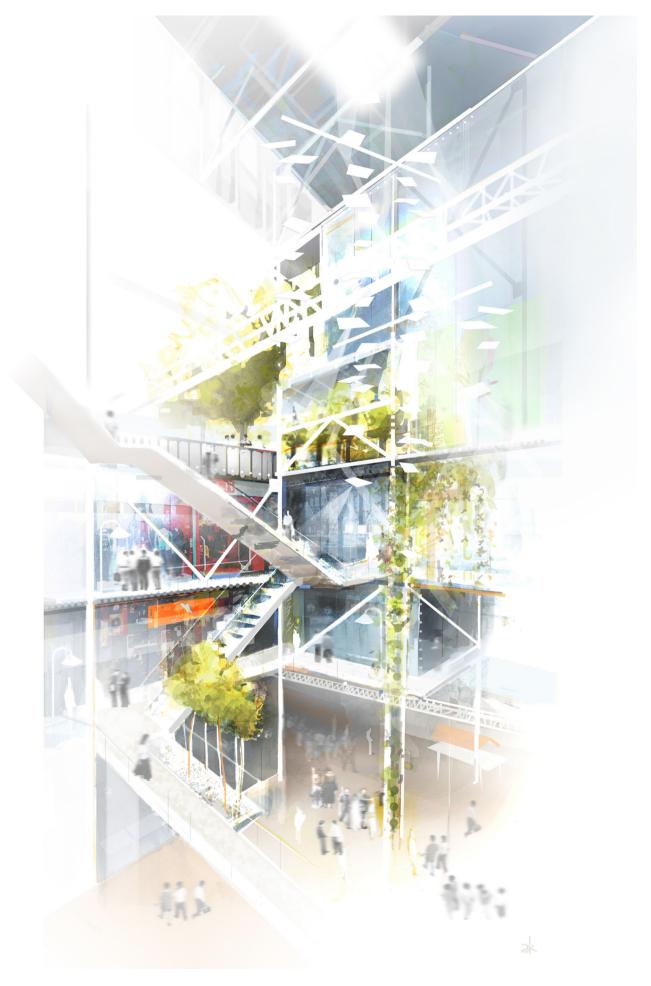


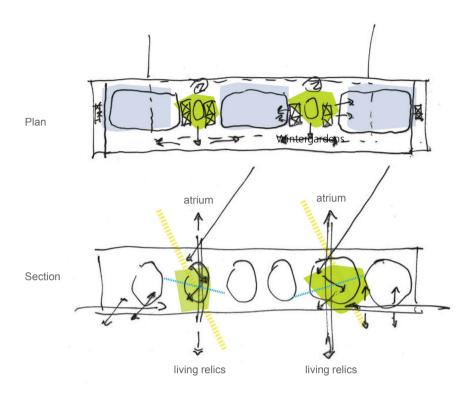


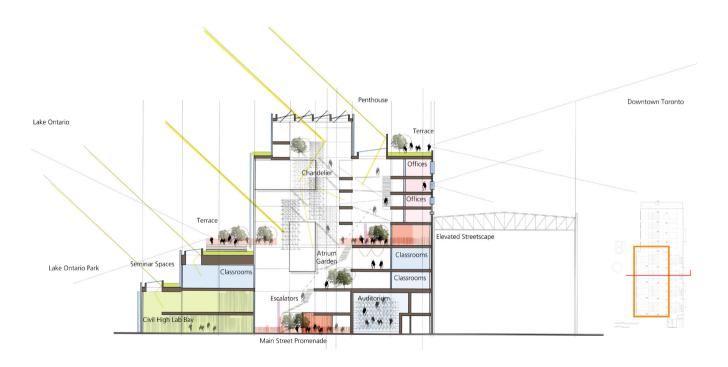
Site plan



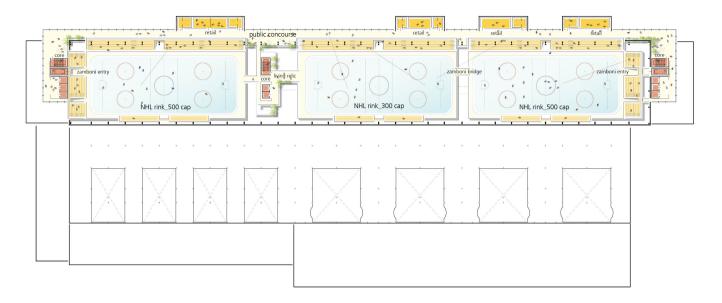
Floor plan level 1







Section



Sports hall upper floor

