

Vancouver 2010 Olympic Village, Southeast False Creek (Millennium Water)

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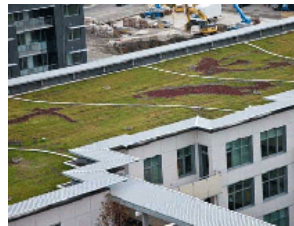
Project Name: Vancouver 2010 Olympic Village, Southeast False Creek (Millennium Water)
Year: 2009
Owner: The City of Vancouver
Location: Vancouver, B.C., Canada
Building Type: Multi-Family Residential
Greenroof Type: Extensive & Intensive
Greenroof System: Custom
Roof Size: 287000 sq.ft.
Roof Slope: 2%
Access: Inaccessible, Private
Submitted by: Greenroofs.com

Designers/Manufacturers of Record:
 Developer: Millennium Development Corporation
 Extensive Greenroof System: Xero Flor Canada
 Roofing Contractor: Topline Roofing
 Landscape Architect: Durante Kreuk



The \$1-billion-plus Vancouver Olympic and Paralympic Village in Southeast False Creek is hosting 2,800 world-class athletes for the Vancouver 2010 Winter Games. Millennium Development Corporation developed the property, also known as Millennium Water. Millennium Group worked with the City of Vancouver to develop the first phase of Southeast False Creek (SEFC) that will be home to Vancouver's last downtown waterfront community, framed with extraordinary views of the city's downtown skyline with a dramatic backdrop of the North Shore mountains. Completed in November of 2009, the new 14 acre landmark development, Millennium Water, is an urban centre for residential, commercial/retail and public use and a ground breaking sustainable community that will set a precedent for future projects in Canada and North America. SEFC buildings will be a showcase of sustainable development and designed to LEED® Gold, with a goal of LEED® Platinum for the community centre. The lavishly landscaped development comprises a total of 1,122 low- and mid-rise apartment buildings to be converted to condo units, with 60% marketing housing and 20% rental and social housing. As of late January, 2010, 90% of the homes in the first phase have been sold and the second phase is already 50% sold.

The City of Vancouver required the development to have 50% coverage of living roofs; greenroofs are one of the most visible green aspects of the Olympic Village, and at least half of the 22 buildings' roofs are greened. "Many other sustainable features are included - The buildings also reuse rainwater to flush toilets and irrigate landscaping, and the project is built close to mass transit. And the most innovative green project is a \$28 million system that takes heat from untreated sewage to provide heating and hot water to the village and surrounding neighborhood — all while reducing greenhouse gases," (MSN Real Estate). "Residents moving to Southeast False Creek after the 2010 Winter Games will benefit from the City's Neighbourhood Energy Utility (NEU) project. The first of its kind in North America, NEU will supply hot water and heating to residents by garnering heat from the sewer system. This initiative will reduce carbon emissions by 7,700 tonnes a year, which is equivalent to taking over 1,900 cars off the road, (City of Vancouver).



Below is an overview of Millennium Water's originally proposed greenroof program, slated for 50% planted roofs:

The intent of the green roofs on this project are to reduce the heat island effect of urban development, provide plants to clean the air and add oxygen and provide improved views from adjacent taller buildings.

The green roofs provide minor storm water management benefits and they are sloped to drain.

Greenroof Type and Size: Millennium Water will have both extensive and intensive green roofs, and urban agriculture.

Greenroof System: Millennium Water will use a basic roof buildup of water proofing, drainage filter, and growing medium.

Roof Slope: Most of the green roofs are flat and the structural slab is sloped to drain at 2 per cent. The green roof on the community centre is sloped to the west.

Access: Access is generally for maintenance only.

The Challenge Series (see below) reports, "Duranete Kreuk, landscape designers for the Olympic Village, did their best to create lasting, attractive landscapes. "When you're on the site, the complexity of roof forms and spaces is really interesting – and unique for Vancouver. Each garden is quite a wonderful place," says Peter Kreuk. The team added visual interest to the plantings by arranging them into giant motifs of Olympic athletes (see image below). These will remain as a legacy of the neighbourhood's role as the Olympic Village."

According to an interview in The Vancouver Sun, Peter Kreuk, lead landscape architect on the project, says sedum-vegetated mats were

rolled out like turf over 7.5 cm (3 inches) of growing medium to carpet the extensive greenroofs. Dozens of trees and shrubs have been planted onsite and on rooftops, including magnolia, crabapple, styrax, witch hazel, yew, camellia, sarcococca and boxwood. The potential for rooftop urban agriculture and community interaction will be achieved through the various intensive greenroofs.

Additional thumbnail photos:



Read the excellent Millennium Water: The Southeast False Creek Olympic Village profile from The Challenge Series on Green Roofs [here](#), and Green Amenities, including rooftop gardening, [here](#). The Challenge Series tells the story, published in eight monthly installments available on the web and in print, focusing on the visioning, planning, design and construction processes and celebrates collaboration and sustainable innovation. Order printed copies of The Challenge Series by contacting: print@thechallengeseries.ca.

Visit the Southeast False Creek website [here](#), the 2010 Olympic and Paralympic Winter Games website [here](#), and see a slide show at "Tour Vancouver's Olympic Village" by Christopher Solomon of MSN Real Estate [here](#). Read the February 12, 2010 "What Will Vancouver Look Like When the Winter Games Are Gone?" by Jesse Ashlock of Fast Company [here](#), Time.com's "Vancouver's Olympic Village: Let the Bailout Games Begin" by Sean Gregory of February 10, 2010 [here](#), and The Vancouver Sun's "Olympic Village is city's most lavish new landscape" by Steve Whysall of January 23, 2010 [here](#).

See our original profile of the Vancouver 2010 Olympic Village, Southeast False Creek (Millennium Water) when the project was ongoing, with beautiful photos of the models [here](#). Thank you to Millennium Development Corporation for providing these photos (March 15, 2007); Photo Credits: Danny Singer and Jonathan Cruz. Download a Photo Fact Sheet PDF [here](#), and for questions regarding the Vancouver Olympic Village, please contact Millennium Development Corporation at: <http://www.millenniumdevelopment.com/>. Read the February 16, 2008 Globe and Mail article by Hadani Ditmars "How green was my valet parking" [here](#), the April 19, 2007 "Insurance concerns threaten green roofs," in the Georgia Straight, by Matthew Burrows [here](#), the April 14, 2007 "BC insurers refuse to cover green roofs- Warning leaves Olympic village project and dozens of other development plans in limbo," from Canada.com, by Frances Bula of CanWest News Service [here](#), and the March 7, 2006 The Tyee article by Helena Grdadolnik "Our World Class Olympic Village?" [here](#).

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