

A MORE environmentally sustainable hospital

We're building the new St. Paul's Hospital on the Jim Pattison Medical Campus to be more sustainable and high performance. Using an innovative, sustainable and resilient approach to green hospital design reflects Providence Health Care's foundational principle of reducing our environmental footprint. After all, earth-friendly health care is integral to the well-being of each of us, our communities and our planet.

Green and resilient design

- The new St. Paul's Hospital will be LEED-certified. Leadership in Energy and Environmental Design is an internationally recognized 'green building' standard.
- The hospital is designed and constructed to exceed all stringent City of Vancouver requirements for sustainable site design, access to nature, green mobility, zero waste planning, and low-carbon energy use.
- The hospital is being built to 5 metres above the sea level rise predicted by the year 2100.
- Temperatures predicted by the year 2080 are informing the design requirements of mechanical systems for air quality and cooling.

Maximizing efficiency

- The building envelope and mechanical systems will be highly energy-efficient.
- The window-to-wall ratio is designed to reduce energy consumption while maximizing natural light.
- Extensive use of LED lighting fixtures will save energy. And, all exterior light fixtures are angled to prevent any light from being exposed to the night sky.
- A high level of roof insulation will reduce heat loss in winter and heat gain in summer.
- Energy savings will be tracked and identified using advanced meters and analytics.
- Waste heat will be recaptured and reused from building exhaust and heat-generating equipment to reduce emissions and energy consumption.

Minimizing impact

- Greenhouse gas emissions will be reduced by using heat recovery chillers which reduces the demand on boilers.
- Building materials and finishes were selected and handled to reduce waste, environmental degradation, and harmful chemical contaminants and emissions.
- Ultra-low emitting formaldehyde composite wood products will be used to reduce harmful toxins indoors.
- A construction waste management plan will divert at least 75% of construction waste from landfills.
- Green infrastructure solutions will reduce and filter storm water runoff before discharge to municipal infrastructure, and maximize reuse on-site.
- An in-hospital recycling program will divert recyclables from landfills — this includes appropriate containers, paper, refundables and in some hospital areas Styrofoam and medical waste.

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Greener commutes

- Greener commutes are encouraged by a campus design which considers and promotes walking, cycling, and car-sharing.
- The campus is designed to make all modes of travel safe, convenient, comfortable, and fun for people of all ages and abilities, reflecting the City of Vancouver's goals outlined in the Transportation 2040 Plan.
- The hospital's underground parkade will include 100+ electric car charging stations. Flexibility to grow with future electric charging demand has also been incorporated.
- To encourage biking to work, staff will have access to a 24/7 safe and secure Cycling Centre which has capacity for 200 bikes, plus lockers, showers and washrooms.
- New bike lanes will be added to the campus to integrate into nearby City cycling routes.
- The campus maximizes access to public transit. It's about a five minute walk to the Main Street-Science World SkyTrain and the Pacific Central rail station, plus bus routes are close by.

Planting for wellness

- Landscape design is a critical component of the overall strategy for sustainability and resiliency.
- Over 200 trees will be planted on the site to provide shade, reduce surface heat and offset carbon emissions.
- Landscaping will emphasize drought-tolerant, low-maintenance plants and native species.
- A Wellness Walkway will encircle the campus with people-friendly paths that celebrate the site's rich cultural history and link to our surrounding community.
- The landscape design will integrate with and extend into the neighbourhood's existing urban forest, consider healing, and provide opportunity for public gathering.
- Rooftop gardens, rain gardens, and green roofs will help capture and re-use rainwater while providing healing, therapeutic spaces.
- **Liberal use of BC wood** will help connect visitors to the land, trees and Host Nation cultures.
- A Knowledge Keeper and ethnobotanist from Squamish Nation will inform plants chosen to honour the Host Nations and the Indigenous patients who use the hospital.
- An Indigenous Medicine Garden on the main floor will provide a space for reflection and ceremony and will include medicinal plants.
- A Spiritual Garden will provide a calm, tranquil, outdoor meditative space for people of all faiths and is located near the hospital's main atrium.

The Green+Leaders network at Providence Health Care helps staff learn how to have a positive impact on the planet and their workplace, from waste reduction initiatives, active transportation campaigns, to Earth Day nature challenges and more.

