



**PARCEL 9 STATS**

Usage: Seniors non-market and market housing.  
Materials: Swisspearl and brick.

**East Building**

124,400 SF  
13 Stories  
106 Suites

**South Building**

40,000 SF  
6 Stories  
50 Suites

**North Building**

42,000 SF  
7 Stories  
69 Suites

**Retail**

12,600 SF  
2 Stories

One of the largest parcels in terms of developed area, Parcel 9 is also complex, with a mix of market and non-market housing, plus commercial uses. A “net zero” building – designed to produce as much energy as it uses – it captures waste heat from the food store and heats water with solar energy. The building will be used for non-market seniors’ housing.

On its east side, the market building features an undulating glass wall. “The curved wall gave us the opportunity to better align the suites with the view,” says Stu Lyon of gBL. “It orients them in part towards the water and breaks up the mundane square wall.”

Designing each façade differently to respond to different environmental factors was interesting, says Lyon. “The sunny side of the building has a different design than the shady side,” he says. “It’s much more typical to conceive of a building with all four sides the same.”

One challenge was planning for truck access to the grocery store. “We had a requirement to accommodate the largest size of truck allowed into the City of Vancouver, and this site was not built to allow that size of truck,” says Lyon. “So the complexity of that building was unusual!”

The sunny side has a different design than the shady side, instead of all four sides the same.



Above: Elevation drawing from Walter Hardwick Avenue. The ground floor space on the right side of the image will be the location of the grocery store. Next page: The east façade of Parcel 9 features wavy glass walls that expand residents’ views. The bottom inset photo shows a detail of the solar hot water system being installed on the roof of the net zero building.

**Integrated Design Process**

“Once upon a time once you’d hire an architect, he’d do a site plan for you and then he’d build it,” says Tom Bell. “That model is just about gone.”

Design for the Olympic Village buildings began with an integrated design process where participants worked to articulate shared principles and solve mutual problems. “Having structural, mechanical, electrical, landscape all together, all informing each other, was great,” remembers Bell. “At the start-up phase, you don’t really know how it ought to turn out. You’re learning together.”

Stu Lyon agrees. “It was interesting, a lot of dialogue and sometimes heated discussions around interpreting what’s good green building practice. I haven’t worked on anything more complex; this is the most dynamic group of players and requirements I’ve encountered. It’s been very exhilarating.”

Creating a building that responds to its environment produces new design outcomes, says Bell. “It’s all based on the specific conditions the building will experience,” he says, “instead of towers you could put in Edmonton or Toronto that are all the same.”

Bell believes the work that was done will help create lasting change. “These changes will go back and be embedded in the building code – all it takes is time. Hopefully we’ve moved the bar up a level.”



**Net Zero Housing**

One of the hallmark projects of the Olympic Village is the seniors’ affordable housing project that is targeting Net Zero annual energy use. This is the first multi-unit residential building in Canada to pursue Net Zero, and a huge step toward the City’s ultimate goal of carbon neutral buildings. The SEFC Net Zero building will achieve its goal through a comprehensive approach to energy use reduction in combination with heat recovery and renewable energy systems. The building will be heated using waste heat recovered from an adjoining grocery store. The remainder of the building’s energy use will be offset through the production of hot water using roof-mounted solar thermal technology.

