

Urban living with green ideals

Southeast False Creek seeks to reveal the tangible financial benefits of lessening your environmental footprint

BY ANDREW PETROZZI

Not only is it touted as a model of a sustainable community, Southeast False Creek is getting people thinking about how green ideals can be translated into day-to-day urban living.

The monumental SEFC project, also known as Millennium Water, is hoping to change the way the market views and values green building technologies. For while the list price of a green condo may seem high, it's vital that buyers factor in savings financially and environmentally from dramatically reduced energy and water consumption, the more so as electrical and water rates likely increase.

"How does that translate into sales, quality of life and experience? These are whole things that this project is essentially exploring in terms of what economic value is and what is the consumer is going to see as the economic value," said engineer **Roger Bayley**, principal of **Merrick Architecture** and design manager for SEFC.

The design of SEFC reads like a laundry list of green innovation. For example, radiant heating and cooling systems as well as prominent stairways encouraging people not to use elevators, which already use a third of the power of traditional systems.

"We don't have fan coils whirring away in the bedrooms blowing cold air around with a bunch of bacteria that came from your kid's bedroom. Is that going to suddenly be seen as huge-

ly valuable in the marketplace and therefore have another level of economic value?" Bayley added.

Financial institutions have committed to assessing green sustainable initiatives in their valuations when determining a project's financing, said Bayley.

"I think the issue for the development community, which has always been bottom line driven [and we see that in terms of the initiatives we undertake] is that those things come up against a bottom-line driver," said Bayley. "The real question from our point of view is, 'Is there a drive now coming on the other side of the equation?'"

Bayley confirmed green roofs would be included in the SEFC development, following concerns that insurers would not cover buildings that have green roofs.

"Our provider who is insuring the village came to understand that the technology that we are using for a green roof or a conventional roof is essentially exactly the same," he said.

It was announced in April 2006 that **Millennium Properties Ltd.** would pay the city \$193 million for development sites in the SEFC to build market housing, commercial space, choice-of-use space and underground parking facilities. It would also design and manage construction of 250 units of affordable housing, a child care facility, community centre, non-motorized boating facility and related underground parking. In exchange, the city covered associated construction costs and paid an estimated \$5 million fee.

In order to understand and evaluate the full impact of SEFC as a potential model for other sustainable developments in the region and any of its associated benefits or drawbacks, there must be ways to quantify and measure its performance.

"We're working with the developer to make sure that we have the ability to monitor performance in this community," said **Ian Smith**, manager of development for the Olympic Village and public lands, in the city's Southeast False Creek and Olympic Village project office.

Ken Bayne, Vancouver's director of financial planning and treasury, has been overseeing associated city spending on SEFC and updating the development budget when appropriate, according to Smith. Preliminary costs to date have included the remediation of the site's soil, and densification of the shoreline, as well as construction of the waterfront walkway and bike path.

Smith indicated the project's tight construction schedule made it easier to incorporate environmentally sustainable building



Models of Millennium Water at Southeast False Creek



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technologies, not the other way around. He admitted the city has yet to complete a full cost accounting of the project.

“We’ve always said that at some time we would like to do a full cost accounting assessment of all of the costs and benefits, but we have yet to actually undertake that. We are still very much on the positive side in terms of the money that has been spent on the site. Our infrastructure costs are higher than we originally anticipated, but that’s not surprising in today’s environment.

“All of our indicators so far [show us] that with an integrated design process – infrastructure and buildings – while there have been some additional costs, there has also been savings. The impact of green in terms of cost alone – we’ve noticed that probably these buildings will save about 50% on energy, and about 40% on water. We’ve noted all of those things as positives, but we haven’t actually included them in the calculations. Sometime in the future when we do actually look back and have more information and look at this thing in terms of full costs, I think it will be incredibly positive.”

The city determined that a LEED silver development at SEFC would be cost neutral or add 1% to 2% per square foot, according to Smith, but when the challenge was posed to developers to do more, Millennium indicated it would strive to achieve LEED gold status.

Bayley believes that aspects of LEED gold and platinum accreditation for the project can be achieved at a cost while other aspects present cost savings. Radiant heating and cooling systems are cheaper than traditional systems, whereas wall systems will be more expensive to insure the structure delivers the performance and insulation properties necessary, he said. ■
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