

GROWING A SUSTAINABLE COMMUNITY FROM OUR ROOTS

Mohawk Experiences in Sustainable Housing— The Kanata Healthy Housing Project

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It's an early spring morning in the Mohawk community of Kahnawake as I sit here sipping my fair-trade organic coffee. The snow has finally melted giving way to new life and sprouting growth. A pair of bluejays, cardinals, and countless robins are nesting in the trees around me singing their morning songs. The air is crisp outside, but my bare feet are warm and toasty on the terracotta-coloured heated floor. The large south-facing windows of the house bring in the natural light and heat of the morning sun, and the thick strawbale-insulated walls further surround me with comfortable warmth. I can hear the faint lull of the high-efficiency washing machine in the next room obtaining its warm water from the tanks heated by the solar panels on the roof. The organic texture of the beige stucco walls, and the natural materials, finishes, and colours create a very healthy and welcoming atmosphere, inspiring me to tell you more about our community and our sustainable housing project called Kanata Healthy Housing.

Kahnawake is a Mohawk community of more than 7000 people located on the South shore of the St. Lawrence River near Montreal, Quebec. Although the traditional territory of the Mohawk people encompassed more than 9 ½ million acres, the land area presently held by Kahnawake, one of several Mohawk communities, is only slightly over 12,000 acres. In our language, the word for our nation is Kanien'kehaka, meaning "people of the flint." We form part of the Iroquois Confederacy of the Six Nations who came together in peace many centuries ago when we planted our weapons under the Great White Pine. We are also known as Haudenosaunee or "people of the longhouse," our traditional dwelling, and the seat of all aspects of our social, spiritual, and political life. The Mohawk of Kahnawake have three clans: bear, wolf, and turtle.

Although we were traditionally an agricultural society, the coming of the European, and the outside influences of the last several hundred years, have caused significant changes in the

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social, spiritual, environmental, and economic structure of our society. The Kanien'kehaka people now possess a lifestyle much more removed from the land upon which we once relied for survival. With bordering industries such as a battery recycling plant, and the contamination of our waterway and traditional sources of food, the health of our community members is of serious concern. Asthma as well as other more serious afflictions such as diabetes, scleroderma, and cancer are prevalent in our community. Many of the health problems have also been attributed to the unhealthy building materials, techniques, systems, and finishes used in our homes, where in our cold climate, we spend a significant portion of our time.

Kahnawake is currently faced with the rapid development of affordable housing which has mostly been characterized by conventional unsustainable and unhealthy building materials, inefficient energy sources, inadequate wastewater treatment, the substantial alteration of the landscape, and destruction of natural habitat. This approach has resulted in environmental and health impacts, a disconnection from our environment, social and spiritual unrest, and has been setting an unsustainable precedent for our future generations.

The Kanata Healthy Housing project is a labour of love and commitment to the future well-being of our community. In 1997, several groups in the community, including the Kahnawake Environment Office and Kahnawake Housing Department, obtained funding to address some of the current problems with our housing and infrastructure. A multi-disciplinary team was established with the goal of creating a neighbourhood in Kahnawake that is sustainable, innovative, affordable, healthy, in-tune with our natural resources, and culturally and socially relevant to our community. Fuelled by the events of the 1998 ice storm, which incapacitated our community for several weeks and left many of us disillusioned by the present systems that are meant to support us, the Kanata Team set out on a research and development journey to seek sustainable alternatives to our present housing, infrastructure, and way of life.

Pre-design research was undertaken in 1998/1999. This included a significant amount of community awareness raising and input to make a determination of what should be included in a sustainable house. The team then obtained the services of an architect and engineer who helped

to design the prototype house and neighbourhood masterplan. Construction of the first house began in August 2000. Local contractors were hired to complete various components of the project including construction management, framing, plumbing, electricity, and stucco. Volunteer labour, or sweat equity, was an integral part of the project to ensure affordable and sustainable construction. Volunteers participated in many aspects of construction including framing and interior finishing. An earth block wall and the installation of the switchgrass bale insulation was completed solely by the hands of volunteers. Not only does sweat equity decrease construction costs, more importantly, it builds family and community spirit, and empowers the homeowner with a sense of accomplishment and intimate knowledge of their home. A video was produced documenting the construction process.

Today the completed demonstration house stands as a beautiful testimony of the hard work and dedication of a team committed to the sustainable growth of our community. The Kanata Healthy House has a slab-on-grade foundation, bale-insulated walls covered with stucco, radiant floor heating, an interior earth brick wall made on-site, energy-efficient appliances and fixtures, and healthy materials and finishes. It also incorporates passive solar design, and solar panels to heat the water and the radiant floor heating system. We are offered many gifts by our elder brother the sun. He works silently and tirelessly to help provide our food, our medicines, and our well-being. Yet, many of his other gifts go unrecognized and unused. The sun has the potential to provide us with an endless supply of clean energy to heat our homes and our water and to provide power. Not only have we built a healthier, more beautiful, environmentally sound and efficient home, but the gifts of the sun have also reduced our ecological footprint by eliminating the use of polluting fossil fuels, and reducing our need for hydroelectricity, a far-away energy system which has devastated the environment and social structure of our indigenous brothers and sisters of the north.

I'm very privileged to have had the chance to live in the Kanata Healthy Home while we undertake a monitoring program. The concepts used in the house are being promoted with our future builders through our local media and ongoing tours. A ten-acre site has been dedicated for the development of the Kanata Housing Neighbourhood. As I take my last sip

of coffee, I look out to the landscape around me and envision the vibrant and healthy neighbourhood soon to take shape.

We hope that by sharing the knowledge we gained from our experiences, we will inspire

and empower others to bring sustainability to action in their communities. For more information about the Kanata Healthy Housing Project visit our Web site at <www.kahnawake.com/kanata2000>.