

ASSINIBOINE LANDING WORKING WITH NATURE

by Lynne Mustard

Qualico Developments (Winnipeg, MB) is pioneering a 'back to the prairie ecosystem' movement in land development with Assiniboine Landing, a new 52-acre neighbourhood nestled into a gentle curve of the Assiniboine River in Headingley, Manitoba, just 2 km west of Winnipeg.

"It's more an evolution than a revolution," states Eric Vogan, Qualico's Land Development Manager, "It's a response to environmental sustainability concerns and a reflection of people's lifestyles today, in terms of how much time they want to spend maintaining their property."

In essence, Qualico is returning much of Assiniboine Landing to the prairie landscape of 150 years ago: the contour of the land has not been bulldozed flat, the 18 acres of hardwood forest and tree shelterbelts of maples, ash, basswood and oak are protected in public reserve and the riverbank will be maintained in its natural state. Storm water run-off is channeled through wetlands, an enhancement within the development created by Native Plant Solutions of Ducks Unlimited. These natural areas will encourage birds and wildlife to remain in the neighbourhood.

"I think it's absolutely great," states Brent Wark, Manager of Native Plant Solutions. "It's an ecologically sound approach to development. These types of developments are starting to embrace and demonstrate all of the sound land use ethics and water quality principles that need to be applied broadly across the North American landscape."

Mike Scatliff of Scatliff+Miller+Murray Landscape Architects concurs, "You can't give Qualico enough credit for having taken this bold step and making this commitment. It's not a simple undertaking. In the early part of the last century, people made little effort to understand and appreciate or develop a knowledge base of the natural systems that were in place. Settlers arrived here with their own knowledge of grasses and plants they had used in Europe and Asia and they brought them with them. There was very little research done on native plants. They weren't aware of the environ-

Lynne Mustard is a writer and editor, as well as a managing partner with Cordray Mustard Media Services. She was born in Killarney, MB, and was raised and educated in Winnipeg. She currently lives and works in Victoria, BC.

mental degradation that was going on. Only now are we questioning how we can keep water clean, why we're putting so much fertilizer into the ground, why is everything so sensitive all of a sudden? It's because we didn't take the time to understand the system. And yet it's simple when you look at it. The complexity is not in the natural system, it's in all of the abuse that we throw at it."

A More Natural Neighbourhood

Qualico's vision for the property is described in its Community Development Guidelines. "Assiniboine Landing is a unique pocket of land carved out of the prairies thousands of years ago by the Assiniboine River. When settlers first arrived in what is now Headingley, Manitoba they would have seen waves of prairie grasses, perhaps a small oxbow wetland, and bluffs of aspen or oak forest, all teeming with wildlife. Along the river you would find cottonwood, basswood, ash, and maple trees lining the banks. Over time, human settlement has changed the landscape

"Imagine if you could turn back the clock and recreate the original landscape. Our vision in Assiniboine Landing is to introduce houses and lifestyles that both build on this rural tradition and harmonize with the natural setting. Through architectural and site development guidelines, homeowners will embrace a land ethic that promotes sustainability."

Those homeowners will each have a lot that is just over half an acre, part of which will be prairie grassland and part manicured yard. In total, there are only 52 lots on Assiniboine Landing's 52 acres, with half the lots facing the river and the other half backing onto public reserve. Out of the gross area of 52 acres, about 27 or 28 acres are home sites; the remainder are either public reserve or roadways.

Vogan says that in develop-



ing the property, they worked hard to retain the trees and “were lucky to have a contractor and municipality that were willing to work with us on bending rights of way as well as street and pipe alignments to minimize the impact on the forests.”

The Rural Municipality of Headingley was pleased to accommodate Qualico’s ideas, as it is very supportive of this kind of sustainable development. “Assiniboine Landing is an absolutely superior, upscale development that is totally unique,” states Marly Mustard, Headingley Municipal Councillor. “Everybody who sees it is very impressed, it is so attractive. There is no question it will be a positive asset to our community.”

Once Assiniboine Landing is fully developed, Qualico will have created a neighbourhood in Headingley that is much lower in cost to administer and maintain. As the public reserve of Assiniboine Landing is largely forest or prairie grassland, cost of management and maintenance is far less than for the typical municipal park. For example, it costs about \$1,400 to \$1,800 per year to maintain one acre of Kentucky bluegrass, factoring in seed, watering, fertilizing, gas for mowing and the time to tend it, as opposed to about \$300 to \$500 once every 4 or 5 years to maintain an acre of native prairie grasslands.

The development’s landscape guidelines for homeowners require that natural borders be planted with native trees, shrubs grasses and flowers, and extend at least 3 m (10’) into the front yard from the naturalized boulevard, and at least 1.5 m (5’) on each side of the property line. Where the rear yards back on to public reserve, the depth of the natural area must be 3 m to 9 m (10’ to 30’) and lots on the river must leave 24.5 m to 27.5 m (80’ to 90’) of riverbank in a natural state. This will make maintaining their yards much less time consuming and provide a transit and habitat area for wildlife.

TREES

*I think that I shall never see
A poem lovely as a tree.*

*A tree whose hungry mouth is prest
Against the sweet earth’s flowing
breast;*

*A tree that looks at God all day,
And lifts her leafy arms to pray;*

*A tree that may in summer wear,
A nest of robins in her hair;*

*Upon whose bosom snow has lain,
Who intimately lives with rain;*

*Poems are made by fools like me,
But only God can make a tree.*

Joyce Kilmer, 1886-1918

Qualico is also restricting the use of fencing, with no fencing allowed within 6 m (20') of the rear property line of public reserve lots, and no fencing within 24.5 m (80') of the rear property line of river lots. This will allow for the expansion of the adjacent forest and grasslands and continuity of the transit and habitat area for wildlife. Further, the developer is encouraging the use of "living fences," comprised of native trees and shrubs, wherever possible. Fences around pools and for protecting children or pets are to be built only within the manicured yard area.

Nature's Water Filters

In the interests of sustainability, two low areas within Assiniboine Landing have been returned to wetlands, which are both aesthetically and functionally superior to the typical, sterile urban storm water retention pond normally found in a new development. There is also the possibility that individual homeowners can create mini wetlands in any low areas of their yards, if they wish.

Brent Wark of Native Plant Solutions states, "Wetlands are called Nature's water filters for good reason. They can trap and hold a very high percentage of the nutrients and pollutants found in runoff water. Some are metabolized or given off as gases but most stay in the roots or soil and do no harm. The water that runs into the river system is much cleaner."

Several years ago the Urban Development Institute of Manitoba, of which Qualico is a member, asked the City of Winnipeg to consider alternate storm water drainage methods to the traditional pipe and pond system. Since then, other pilot cases

Chris Penner from Native Plant Solutions



Left: construction of the large pond at Assiniboine Landing, a Qualico development in Headingley, MB. Native plants to be used for revegetation of the pond area include native soft stem bulrush, cattails and spike rush.

with the City of Winnipeg have had the same results of much cleaner ponds and cleaner water into the rivers.

With regard to the issue of mosquito larvae and standing water, Wark explains, "The difference in a healthy, productive wetland is that you have a good population of creatures such as dragonflies to eat mosquito larvae. Further, these wetlands do not provide the type of habitat preferred by mosquitoes that carry the West Nile Virus." He added that the Assiniboine Landing wetlands are deep enough to get some wave action that will further reduce the larvae population.

Cleaning Up the Forest

When Qualico first took over the Assiniboine Landing site, it had John Dyck of Plus4 Consulting, Forester John Hreno and the Manitoba Habitat Heritage Corporation do a "Forest/Tree Resources Description and a Clean-up Operating Plan." This included an inventory of the trees to "assess the overall species composition, stand structure, health and condition." This means that any sizable trees in Assiniboine Landing were counted, measured for diameter and height and assessed for quality. Trees were then classified as being in good health or poor health, and any that were or might soon become a hazard were identified. Any sign of wildlife presence was also noted.

The composition of the understory vegetation was also identified, including shrubs, herbs and grasses.

A clean-up of the forest was then conducted to remove hazardous trees, invasive species and dead, woody debris. Once the clean-up was completed, Dyck and Hreno then created an "Urban Forest Management and Maintenance Plan" for the development. Objectives of the plan are to minimize risk of the trees falling and doing damage or harm, and to maintain the forest environment in a healthy state.

Normally Dyck's work involves environmental studies and environmental impact statements in northern Manitoba for projects such as hydro development. He terms his involvement in the Assiniboine Landing project, "... a first for me. It's interesting."

He continues, "I guess, along with a lot of other people, I've wondered why developers strip the land bare and then try to re-grow things. I've often wondered why they couldn't maintain what was there instead of tearing it all down. I think what Qualico is doing here is excellent."

Dyck also believes that people are more conscious of nature and the environment around them and want to preserve it wherever they can. Qualico has wisely tapped into this desire in choosing to develop and market Assiniboine Landing in the manner it has.

“I think it’s going to be a very desirable development,” Dyck states, “You have green space all through the area, and lots of trees, loaded with birds. I think it’s a wonderful place!”

Living with Nature

Assiniboine Landing is indeed “loaded with birds,” with a total of 33 species recorded in an inventory that Qualico had Native Plant Solutions undertake in 2003. These included the American goldfinch, Brewer’s blackbird, Canada goose, cedar waxwing, yellow warblers, and northern orioles; all species are indigenous and none are considered rare or endangered.

A wide variety of wildlife also inhabits Assiniboine Landing and the surrounding area and river. The area is home to squirrels, chipmunks, mice, voles, snakes, deer, rabbits, raccoons, skunks, beaver, bats, and all manner of insects, as well as butterflies and moths. Qualico has prepared a Living With Nature guide for homeowners with tips on how to enhance the experience while reducing or eliminating any potentially negative aspects.

A Long History

Human habitation of the area goes back thousands of years, to the time when the shores of the Assiniboine River provided food and shelter for both bison and Aboriginal peoples who hunted them. A total of four archaeological excavations and several surface collections have been conducted in the area, with Qualico hosting a dig by the universities of Manitoba and Winnipeg as recently as June of 2004.

“They found artifacts relating to occupation of the land over a period of time extending back 5,000 years,” Vogan states. “This curve in the river where Assiniboine Landing is located was a crossing point for bison and people would camp there and take down a good haul of bison and then process them, doing everything from boiling the bones for marrow to making pemmican.”

Then came the wave of European exploration and settlement; Qualico took the development’s name from this era.

“We were aware that the parcel of land comprised a large portion of Lot 1 in the Municipality of Headingley, which was deeded to the Hall family in 1859 by the Hudson's Bay Company,” recounts Vogan. “They farmed the land, but also established a homestead called The Hermitage.” The Hermitage was always an open house, a refuge and a social centre for those who settled in the area or were just passing through. It was also a port of call for the river steamers that stopped for fuel or overnight, as they carried their loads of settlers west and returned with cargoes of produce bound for Winnipeg and points east or south.

From this early use, the land has since been used for farming and market gardening. Three generations of the Kuypers family spent their lives on the property that is now Assiniboine Landing. Jack Kuypers lived there from 1949 to 1975 and recommends it as a great place to raise kids, with lots of fresh air and such beautiful countryside that, he declares, “you couldn't ask for anything better.”

Once the site is fully developed, Qualico's involvement with the land will end. The company recognizes that it must leave Assiniboine Landing with the means to ensure that the natural environment is preserved as originally developed and planned. To that end, it has created a community association that will be driven by the residents of the area. It will be their job to ensure the natural areas are maintained and to preserve the concept.

Latest reports show that this 'natural neighbourhood' is being very well received by the market. As of mid-2004, over 60% of the lots in the first phase of the development have been sold, which is proof that if you build it in a natural, sustainable way, they will come.



Richard Prins



A gentle curve of the Assiniboine River as seen from the shore of Assiniboine Landing.