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# RESIDENTIAL INTENSIFICATION CASE STUDIES

## Built Projects

### GARRISON WOODS

Calgary, Alta.

Between Crowchild Trail, 20<sup>th</sup> Street, 34<sup>th</sup> Avenue and 47<sup>th</sup> Avenue

#### Developer

Canada Lands Company

#### Date completed

2003/04

#### Site area

65 ha (161 acres), plus 6 ha (15 acres)  
of established uses

#### Number, type of residential units

1,600 units—new townhouses; new, single-detached houses; new apartment buildings (three and four storey); refurbished single- and semi-detached former military housing units; new single-family infill among the refurbished units; apartments above retail outlets; and, some coach house (mortgage-helper) units above garages on lanes

#### Floor area

60 to 232 m<sup>2</sup> (650 to 2,500 sq. ft.)

#### Gross residential density

25 uph (units per hectare)

#### Landscaped open space

Eight per cent in parks and common open space,  
as well as private landscaped areas

#### Maximum height

Four storeys

#### Parking

Two-stall garages for all single, semi-detached houses and townhouses. Each apartment unit has 1.5 spaces underground parking, except a senior's project, which has substantially less.

#### Non-residential units

6,500 m<sup>2</sup> (70,000 sq. ft.) retail space; two private schools, 4,090 m<sup>2</sup> (44,000 sq. ft.) and 2,790 m<sup>2</sup> (30,000 sq. ft.); existing museum and twin hockey arena

#### Pre-development use

Canadian Forces Base (CFB), with 565 low-density housing units for military personnel



Figure 1: Garrison Woods: townhouses look onto the neighbourhood square

#### Selling prices

	2003	2000
Apartment condos	\$120,000–\$220,000	\$90,000–\$190,000
Townhouse condos	\$325,000–\$425,000	\$250,000–\$325,000
New singles	\$500,000–\$700,000	\$330,000–\$425,000
Refurbished singles	\$290,000–\$340,000	\$195,000–\$340,000
Refurbished semis	\$240,000–\$290,000	\$150,000–\$190,000
New infill singles	\$350,000–\$450,000	\$290,000–\$350,000

Garrison Woods, the redevelopment of the eastern part of the former Canadian Forces Base (CFB) in Calgary, is made up of 1,600 residential units including new townhouses, new single-family homes, new three- and four-storey apartments, refurbished single- and semi-detached former military housing units, and new single-detached infill homes among the refurbished units. Secondary suites (mortgage helpers) are included above garages on some of the lanes. Many of the former military buildings have been reused for community amenities. Developed by Canada Lands Company, a federal Crown corporation, this "new-urbanist" project challenges conventional standards of the City's engineers with rear lanes, customized road standards, mixed uses and a mix of densities to achieve an overall gross density of almost 25 units per hectare—high for a new subdivision.



Figure 2: Commercial corner at Garrison Woods showing customized road standards

## PROJECT OVERVIEW

When the military moved out of the Canadian Forces Base in 1998, more than 182 ha (450 acres) of land were left vacant. This huge tract was split into three parcels (one on the east, CFB East, and two on the west) with west and east separated by an arterial road. CFB East was the site of 565 housing units for military families, at a density of approximately 7.5 units per hectare. In 1997 Canada Lands Company (CLC) acquired CFB East. CLC, a federal Crown corporation, buys surplus federal land at market prices and creates socially responsible developments without subsidies, acting at arm's length from the government.

The site is surrounded on three sides by 1950s-style, lower-density residential development with commercial to the north. CLC persuaded Canada Safeway to be the anchor tenant for an existing retail area at the site's north end. Higher-density housing surrounds this anchor and other retail uses and forms the neighbourhood core of Garrison Woods.

From the outset, CLC wanted to respect the principles of smart growth and sustainable development. CLC was convinced that a well-planned and executed redevelopment scheme would be successful from both a financial and community perspective. The site's location, just a 10-minute drive from the core, combined with the high level of available services and site amenities, like mature trees, were also key considerations and led the company to believe it could deliver a development unique to the City of Calgary.

The community that has quickly developed at Garrison Woods is characterized by diversity. It is mixed-use and mixed-scale. It contains mixed housing types, including refurbished military housing. Echoing a 1920s pedestrian-oriented community, the project is very urban for Calgary, which has a history of suburban development.

The CLC invested heavily in the public realm with high-quality landscaping, interpretative signage recognizing the site's military history, customized road standards allowing many mature trees to be saved and a high-quality design esthetic.

The project was not originally conceived as a new-urbanist development, but Mark McCullough, CLC's general manager of real estate, says the approach grew out of the company's desire to ensure respect for Calgary's strategic planning policies, such as sustainable development, transportation and housing. CLC also had its own goals, including a commitment to smart growth. There was a deep desire to integrate with the surrounding community. The new-urbanist approach, including a modified-grid street pattern that enables integrated vehicle and pedestrian movement between Garrison and the surrounding area, grew out of this desire.

CLC identified four traditional architectural styles that have stood the test of time in Calgary: Tudor, Colonial, Craftsmen and Victorian. The company's architectural consultants then developed codes for participating builders and each elevation and plan was individually approved to ensure conformity with the code. This approach produces plenty of variety while allowing a compatible architectural theme to emerge. It also allowed integration of the old stock with the new stock and the multi with the single.

CLC required builders to refurbish 400 of the 565 existing military housing units. CLC also required that some existing buildings be reused for the two schools. These existing buildings were relocated and rearranged to fit the denser site plan of Garrison Woods.

## PROJECT SUCCESS: DEVELOPER'S PERSPECTIVE

*If you are going to ask people to live at higher densities, our view is that you have to provide quality public space. We put a lot of money into tree-lined boulevards, specialty lighting and interpretative signage to celebrate the military history.*

**Mark McCullough, general manager, real estate,  
Canada Lands Company, Calgary**

### Costs and financing

Development costs are not available but the project is achieving rates of return consistent with, or perhaps slightly higher than, industry standard.

CLC estimates that it was 30 per cent more expensive to develop Garrison Woods than a traditional suburb. Increased costs are associated with heavy investment in the public realm, the extensive use of consultants, the time required to get approvals for a non-traditional subdivision, the use of lanes and development and implementation of detailed architectural codes.

The project's initial phases were financed from corporate equity with subsequent phases being financed from the revenue generated by sales and interim leasing activity. No third-party financing was required and there was no government financial assistance at any level.

## Marketability and profitability

By August, 2003, all lots had been sold and 70 per cent of the units were built and occupied. Canada Lands sold serviced lots to six participating builders and concentrated on developing a unique product in a considerably undifferentiated Calgary market. Assisted by a good location, the project has been very successful for the developer, and has exceeded profit expectations because of the increase in real estate values since the project was started.

A fairly aggressive marketing program was adopted costing \$500,000 a year. This wasn't the first new-urbanist project in the city. McKenzie Town had proved the value of this high-quality design approach, which gave Canada Lands confidence that Garrison Woods could sell well, given its excellent location.

The Calgary real estate market has been extremely hot in the last two to three years. Even by City standards, however, Garrison Woods has seen a remarkable lift in prices fuelled by a high demand for this type of product.

## Obstacles

*We have great support at the senior [planning] level, but the line guys [engineering department] put up huge obstacles...In most instances, the support is not there for traffic calming, narrower streets, higher level improvements in the public realm, etc. **Mark McCullough, CLC***

Despite supportive senior City staff, the major obstacle for the developer was the tremendous resistance to customized street standards from the engineering department at the implementation stage. This made it very difficult to negotiate approvals.

The site was considered a brownfield site. There was some contamination from leaking fuel tanks, which the developer had to pay close attention to by undertaking comprehensive audits. The former owner eventually removed the contaminated soil at a cost of \$1.5 million.

Residential and commercial neighbours were involved in planning using a public advisory committee during a 17-month public process. This process was co-managed by the City and the developer and resulted in very little opposition from the adjacent community. Some concerns about increased traffic were addressed by introducing traffic-calming measures, including a modified-grid street pattern that attempted to slow down vehicles, disperse traffic and discourage shortcutting.

## Lessons Learned

The developer's advice to others wanting to pursue non-traditional approaches is to get assurances from regulators that you will get timely and common-sense approvals. Otherwise, developers need to lobby forcefully. "You have to love this type of work/project and really be determined that you want to go in this direction," says Mr. McCullough.



Figure 3: An extra-wide boulevard creates space for a pedestrian and cycling greenway lined by mature trees.

## PROJECT SUCCESS: RESIDENTS' PERSPECTIVE

*They have done a very fine job of the project all around. The whole feeling of the place is impressive. It is a good use of former public lands. **Resident***

## Affordability

A wide range of housing types is available at Garrison Woods, including single-detached houses, apartments and townhouses. Most of the units are in the 84–139 m<sup>2</sup> (900–1,500 sq. ft.) range and are geared towards individuals and families looking for housing in a unique, well-planned, integrated community. Units are as small as 60 m<sup>2</sup> (650 sq. ft.) and as large as 232 m<sup>2</sup> (2,500 sq. ft.) to attract a range of buyers.

Unit costs follow a similar pattern, selling for a low of \$120,000 for an apartment condominium, to a maximum of \$700,000 for a new, single-detached house. Refer to the price ranges shown on page 1. The average selling price in Calgary in 2003 was \$264,373 for new single-detached homes; \$222,470 for new semi-detached homes; \$168,478 for new townhouse condominiums and \$158,115 for new apartment condominiums.<sup>1</sup>

The residents surveyed felt that their purchases were competitive yet affordable and were extremely happy with their new homes. One resident described his apartment building as "a high-quality living environment."

## Design features

The general consensus within the Garrison Woods community is that the design, landscaping and character of the community is admirable. All of the residents thought they had enough, if not more, space than they needed and found the diversity of housing styles and types created a more interesting streetscape.

<sup>1</sup> CMHC, Market Analysis, Prairies, Nunavut and N.W.T. Business Centre.



The density of the site is a noticeable factor with smaller houses on smaller lots mixed closely with apartments and multi-level buildings. On the other hand, space is created with the placement of small and large parks, trails and well-landscaped exteriors, which contribute to the goal of a more livable neighbourhood.

The homeowners were happy with a smaller house with a back yard because they felt it was affordable for young families and couples looking to get started on their own. One apartment owner felt that the sizable patio gave more private outdoor space than expected and a nice view into the building courtyard.



Figure 4: Hundreds of the old houses on the military base were refurbished and relocated at increased densities.

## Neighbourhood and transportation

*It is extremely convenient—everything is within walking distance, which for me is two blocks. Resident*

Although cars are still a staple in the new urban village, most residents live within a five-minute walk of a bus stop, a two-minute walk of a park and have a range of commercial options within walking distance. Local shopping includes corner stores, coffee shops, video rental stores and restaurants, some of which are located on the ground floor of the apartments to allow easy accessibility for residents. A large grocery store is within a 10-minute walk of almost all residences for major shopping needs as well. Garrison's proximity to downtown Calgary also makes driving distances short.

Most residents felt that the convenience and ease with which daily tasks could be accomplished was a deciding factor in their move to Garrison Woods. Currently, the community is still growing and with the addition of new commercial enterprises, accessibility, variety and convenience will be even more noticeable. Of the five residents surveyed, three of the four currently in the workforce drive to work. In comparison, 19 per cent of workers in the Calgary CMA walk, bicycle or take public transit to work.<sup>2</sup>

## PROJECT SUCCESS: MUNICIPAL PLANNER'S PERSPECTIVE

*This was a very collaborative process... We worked closely with the developer to develop the policy plan... [and we] worked with a committee of residents and businesses.*

**Linda Hackman, senior planner, City of Calgary**

For Linda Hackman, senior planner for the City of Calgary, Garrison Woods is a great success story, achieving much more than the City had hoped for. The project accomplished a high density with mixed uses. Through the refurbishment of military housing it provided reasonably priced homeownership for 400 families.

Canada Lands Company approached the planning department to discuss the process for planning the lands. From the beginning, City Council agreed on a collaborative process that would involve the public in a significant way, with community events jointly managed by the City and CLC.

### Neighbourhood opposition or support

Initially, the public was extremely apprehensive about the developer's intentions for the site. There was considerable resentment when the Canadian Forces base first closed because of concerns that it would affect local businesses and the community. This concern carried over into early development discussions. As well, concerned citizens were unsure how traffic would be addressed and how increased densities would affect the neighbourhood. However, as a result of the extensive public process, the public came to realize the value of what Canada Lands Company was trying to achieve.

The extensive public process was the largest the City of Calgary has seen, covering a 17-month period of consultation jointly conducted by the City of Calgary and CLC. The open, transparent process allowed meaningful participation through a public advisory committee that included local residents and business owners.

At the end of the day, there was very little opposition to the development proposals. The only opposition related to increased traffic. This was mitigated by the introduction of calming measures and a modified grid pattern to keep speeds down, disperse vehicles and discourage shortcutting.

Within the City, there was a gap in vision between the planners and engineers regarding the proposed customization of infrastructure and services to the development. The developer had a vision for the development that was shared by the planning department, which included alternative standards for road infrastructure. Some of the proposals related to considerably narrower streets and lanes, lower design speeds of 35 km/h, parking on both sides of the street and intersection "bulb-outs" to increase pedestrian safety.

<sup>2</sup> Statistics Canada, 2001 Census

There is always resistance to new models of planning, as well as the uncertainty of taking the route less-travelled, but in the end decisions have been made that appear to satisfy all parties while still upholding the original vision for Garrison Woods.

## Planning objectives

*Vision Statement:* To ensure all existing and new development contributes to the enhancement of [Canadian Forces Base] East as a unique and sustainable inner-city neighbourhood within the Altadore community. **CFB East Community Plan, City of Calgary**

The City of Calgary co-ordinated the planning and development process with the Canada Lands Company from an early stage. This gave both sides the opportunity to work together on this major development and achieve success from a public and private perspective. The municipal development plan for Calgary encourages intensification in older neighbourhoods, so the urban village angle conformed to the basic development planning of the district. This density was structured by centralizing it around the commercial centre and major bus routes.

The goals of the Community Plan were met by varying the size of the buildings and using a modified grid street pattern to improve pedestrian movement and enable short walking times to public transit. The design also encourages community interaction through short building setbacks and front porches and balconies near the street. The design also met these goals by recognizing the land's military history through street names, memorials, public spaces and retrofitting of hundreds of the old military homes.

The City's planning department recognizes the differences in ideology between the engineers, planners and developers. In this case, the engineers were opposed to the street patterns and road infrastructure and the developer's proposed variances were obtained with persistence, determination and support from City planners. Linda Hackman, Calgary's senior planner was thrilled with the vision and innovation incorporated into Garrison Woods and hopes the City becomes more involved in providing incentives for this type of development. The City is supportive on a strategic level, but not yet on the approval level.

This project was part of a unique and forward-thinking proposal and therefore had substantial policy guidelines to follow. The vision, dedication, and determination to make the project work from the planners and developers, combined with the participation of the homebuilders, businesses and public to follow the guiding principles are the reason Garrison Woods is a successful and respected new-urbanist venture.

## Does it fit into the neighbourhood?

One of the central tenets of the CFB East Community Plan was integrating the new neighbourhood into the larger community. This was achieved by using a more open street pattern that allowed access through and between Garrison Woods and the adjacent neighbourhoods.

One of the most intriguing aspects of the developer's plans was an architectural code that guided and controlled the way the builders constructed the neighbourhood. Architect Dan Jenkins identified four architectural styles—Tudor, Colonial, Craftsman and Victorian—as having stood the test of time in Calgary's history and they were presented as guidelines for character.

The mixing of these styles throughout the streetscape of Garrison has been celebrated as a victory in architectural planning and creates clear connections between Garrison and the older neighbourhoods in Calgary. The Garrison Woods development has prompted new redevelopments in the surrounding neighbourhood to modify and rejuvenate the community.

## Regulations and approvals

Because the new-urbanist concept of an integrated and interactive neighbourhood was quite new when the process started five years ago, the approval process was fairly complicated. The City implemented interim zoning regulations to allow for the short-term reuse of the existing military housing within the new Garrison policy plan. The City also attempted to accommodate the CLC's density proposals and housing arrangements through the new policy plan. There was a high level of scrutiny over the land-use bylaw and the adaptations required to allow for design and development standards. This was eventually approved on a block-by-block basis.

Approval from the surrounding neighbourhood and citizens was gained with relative ease. The hardest people to gain approval from were City administrators in the transportation and engineering departments, who were concerned with the new-urbanist principles of the plan such as narrower streets and lanes, intersection bulb-outs, road patterns, custom-made street signage and historical interpretation signage. Having decades of experience building classic suburbs, it was hard for some of those involved to adapt to the customized standards. The major concerns for City departments centred on long-term maintenance cost and performance of these items.

## LESSONS LEARNED

There is no question the Garrison Woods redevelopment project is a resounding success but it took several years and tireless effort on the part of the planners and developers to craft this success story. Planner Linda Hackman says, "It's been a real learning curve for Calgary."



The difficulty of addressing and pioneering new ways to create neighbourhoods and communities has been felt by all parties involved in the Garrison project, but in the end the learning process was positive.

The planners were lucky to have a developer with so much interest in working with the City to incorporate the goals of both sides. Canada Lands Company, as a federal Crown corporation, has a more socially responsible mandate than many profit-based developers and therefore, more interest in new forms of community living. The success of a project has a lot to do with the relationship between the public and private sectors (City and developers) and their ability to co-operate to produce creative solutions to complex problems.

## FURTHER INFORMATION

Further information is available from:

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**Planning Consultant:** Greg Brown, Brown and Associates  
**Architect:** Dan Jenkins, Jenkins & Associates  
**Landscape Architect:** Jim Laidlaw, IBI Group



Figure 5: Site plan for Garrison Woods (CFB East)

**OUR WEB SITE ADDRESS:** [www.cmhc.ca](http://www.cmhc.ca)

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