

Informing Sustainable Design on The Downtown Edge: Lessons for Winnipeg from The Quarters

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CASE
IN
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Abstract

Through cutting-edge planning and design processes, The City of Edmonton will soon see the transformation of a once derelict area into a leading green community known as The Quarters. As project lead, the architecture firm O'Neill O'Neill Procinsky Architects (ONPA) was contracted by The City to develop an extensive urban design plan, an area redevelopment plan, new zoning bylaws, and detailed streetscapes for the renewal of eighteen city blocks immediately east of the downtown core. The planning document produced is the result of comprehensive participatory planning processes with stakeholders and developers. Further collaboration with other experts in green urban design, urban planning, landscape architecture, and civil engineering led to a comprehensive plan and specific development requirements for The Quarters. The designs were

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then presented in a series of public meetings to gather public opinion.

The result of this Urban Design Plan will be a high density infill community that encourages mixed-use development, improves walkability and accessibility, incorporates sustainable and green design, and increases affordable housing for The Quarters. This case study is an innovative example of sustainable and environmental initiatives. Many of the planning and design guidelines can be applied in improving similar urban design situations in the City of Winnipeg.

Background

Formerly known as Edmonton's Downtown East, The Quarters is located east of the downtown core and is home to approximately 2400 residents. The site is bounded by 97 Street to the west, 103A Avenue to the north, 92 Street to the east, and the bank of the North Saskatchewan River to the south. Originally one of the most vibrant trading centers at the heart of the city, commercial activity and development has since moved west over the past century.

Since the 1970s, the area has seen the removal of many old buildings and houses. Many of the vacant lots were left undeveloped while others have become parking lots that cater to those working in Downtown. Today, parking lots make up a large portion of the site with over 4000 parking spaces. The area has also been perceived negatively by the public due to its many problems with crime, prostitution, and vandalism.

However, a lot of available opportunity exists in the area. The site is near the river valley and downtown, and has a rich history, varied ethnic population, and nearby amenities and services. Only recently, the development in the area has begun to take a turn and a number of mixed-use residential developments are beginning to take place along the riverbank.

To address the rising concerns for the future of the area, the revitalization of The Quarters



The large amount of vacant lots east of Downtown Edmonton will soon be transformed to pedestrian-oriented mixed-use development.

became one of the "Building the Capital City, Edmonton City Council Special Initiatives, 2005-2007". The City is now investing heavily in the neighbourhood to develop a community of active living, environmental stewardship, cultural diversity, and thriving economy.

In 2006, The City began a visioning process for the renewal of the area. A series of public consultations were conducted to identify the public's core values. The goal was to build a neighbourhood through these values where citizens would choose to work and live in.

From these meetings, it was gathered that citizens desired a safe neighbourhood that would provide "a mix of affordable housing, high density housing, neighbourhood shops and businesses and cultural showpieces". Citizens also stated they wanted to maintain the view of the river valley and that there should be minimal displacement in the process of development. The resulting Vision document fully reflects public input and contains guiding principles and the physical framework for The Quarters. To accelerate the revitalization, the City is prepared to invest approximately 300 million dollars to be used in purchasing land, redeveloping streetscapes, upgrading infrastructure, and developing park land to achieve the vision.

Facts of the Issue

Comprehensive Public Engagement Strategy

In the spring of 2007, Edmonton based firm ONPA was hired as the prime consultant by the City of Edmonton to move the revitalization forward from visioning to an action plan. Throughout the creation of the Urban Design Plan for The Quarters, public involvement was a key component in informing every step of the process.

The process began with a thorough analysis of all existing conditions. During this analytical stage, over a dozen stakeholder meetings were conducted. Stakeholders involved include law enforcement, social service providers, property owners, developers, a special advisory committee, residents and businesses in the area, surrounding community leagues, business associations, other business interests, First Nations, and youth. Taking the needs, desires, and concerns of the stakeholders into consideration, charettes and consultations with experts in all fields of design were conducted and the initial urban design plans were drafted.

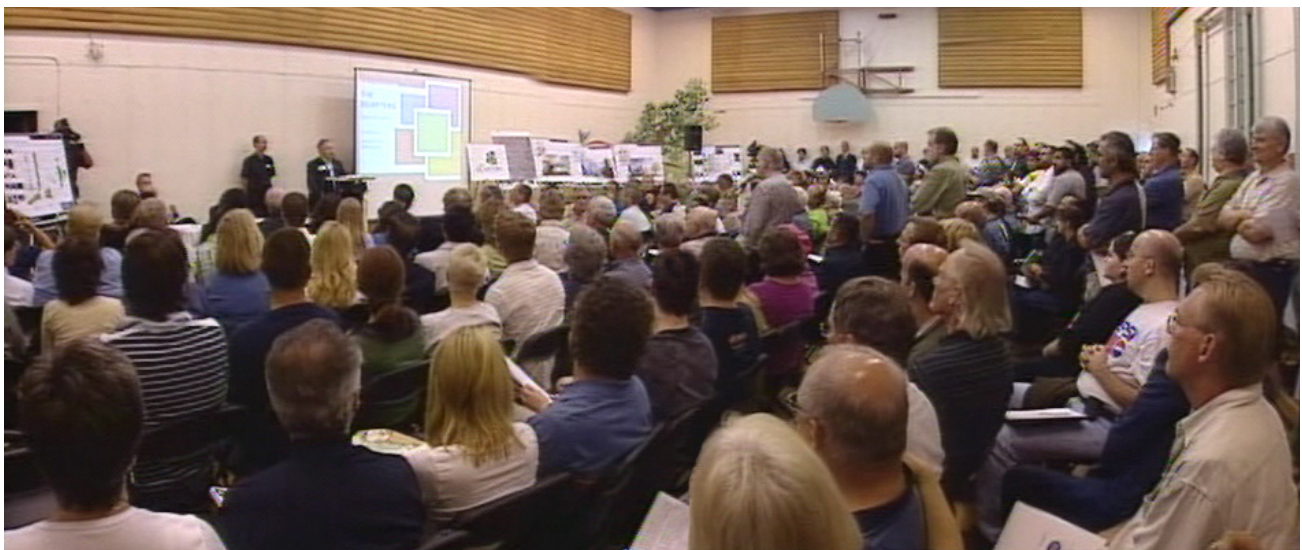
To date, three public meetings have been organized for the Visioning process. Two additional public meetings have been held to

present the most recent plans and “to ensure that the development process is inclusive and reflects the interests, needs and desires of local citizens and stakeholders”. These meetings give the opportunity for residents, business owners, land owners and other members of the general public to voice their input and to address their concerns. Further question and answer periods allowed the exchange of dialogue between urban designers and the public.

The result of this comprehensive public participation process is a documented guideline for the redevelopment of The Quarters that is thoroughly informed by design experts and stakeholders. Included in the document are a Public Involvement Plan, an Overall Urban Design Plan, Conceptual Streetscapes, a Servicing Upgrade Plan, and Statutory Plan Amendments.

Lessons Learned

The Quarters is to be a leading green community with a cutting edge approach to urban design. The following exemplary planning strategies are highlights of the Overall Urban Design Plan that may be informative as a precedent in Winnipeg’s urban design. Integrated into the strategies are Sustainable Urban Design Principles that encompass economic, social, and environmental aspects.



Citizens and stakeholders were largely supportive of the plans and designs shared during a public presentation on August 15, 2007. Approximately 300 people attended the meeting.

Encouraging Sustainable Transportation

The Quarters strives to provide active living and sustainable transportation alternatives “where walking, cycling, carpooling, car-sharing, and the use of public transit are enabled and encouraged”. New parks, paths and transportation routes in The Quarters will further improve connections to the North Saskatchewan River Valley, Downtown and Greater Edmonton. Active transportation is encouraged through the creation of dedicated bike lanes and wider sidewalks. Convenient transit links to the ETS bus and the LRT system have also been planned.

The existing number of parking spaces in The Quarters will be significantly decreased to further encourage the use of active and public transportation. In fact, the new Sobeys grocery store in Downtown Edmonton has provided no parking space and caters specifically to those who work or live in downtown. Where needed in The Quarters, environmentally appropriate parking structures are to be constructed with preferred parking provided for car-sharing and alternative-fueled vehicles. In addition to these considerations, Downtown Winnipeg may look to higher parking costs to deter citizens from driving. Additional revenue from parking may help to fund streetscaping initiatives. Currently Winnipeg has some of

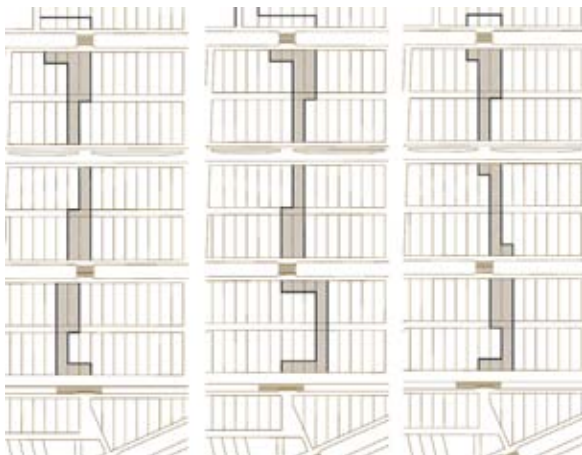


The combination of new paths, streetscaping design, and a significant decrease in surface parking will contribute to a more walkable pedestrian-oriented neighborhood in The Quarters.

the cheapest parking in comparison to other Canadian cities.

To foster a pedestrian-oriented neighbourhood, The City of Edmonton has purchased numerous lots throughout the neighbourhood for the purpose of breaking large horizontal blocks into smaller walkable blocks. These breaks provide many additional north/south pedestrian connections in the neighbourhood while providing opportunity for new corner businesses. While maximizing sunlight exposure and improving street climate, these new paths have also been designed to prevent unsafe corners and enclosed spaces. A number of existing back lanes will be streetscaped further with walkways, landscaping, and new townhousing developments which front onto them.

The same idea may apply to breaking vertical Downtown blocks in Winnipeg with development fronting back lanes and additional pedestrian-oriented walkways similar to The Promenade along the north entrance of the Portage Place Shopping Centre or Edmonton’s Rice Howard Way. These spaces in between buildings are essential to enhancing the public experience and encouraging pedestrian activity.



A study on rescaling the blocks shows potential options for future pedestrian connections throughout The Quarters.

Mixing Land Uses

Creating a mixed-use neighbourhood reduces the need to drive and increases convenience for local residents. Active street-life and a variety of activities at all hours of the day will improve neighborhood safety and bring eyes on the street. To implement such development, The Quarters neighbourhood has been rezoned a Direct Control District with mixed-use requirements and specific design guidelines written into the by-law. Many lots will now be required to have the first one or two storeys designated for commercial or office space.

Through mixed-use zoning, The Quarters will support economic diversity through a range of employment and shopping opportunities for visitors and residents of all income levels. For winter cities like Winnipeg, providing more commercial space throughout a neighbourhood would also allow citizens to warm up and make longer walks more bearable. The City of Winnipeg has only recently begun to implement mixed-use zoning in parts of Downtown. It would definitely be beneficial to expand mixed-use zoning to other neighbourhoods and Pembina Highway. On the other hand, key urban design considerations such as building placement and façade treatment are only encouraged and not currently required in Winnipeg Zoning By-laws. Furthermore, the



The Armature provides open recreation and gathering space with mixed-use development fronting the park.

design guidelines are vague in definition and subjective. Specific urban design requirements including streetscaping treatment, tower form, and minimum glazing percentage that are well enforced such as in The Quarters may be the next step in ensuring improved urban design and pedestrian-oriented environments in Winnipeg.

Creating Public Spaces

In the Quarters, public spaces will create a sense of place and community through the integration of focal points that attract visitors and become hubs of activity. For example, new intersections in The Quarters will have corner stores that are encouraged to be cut back in order to create urban rooms.

By far the most significant public space in The Quarters is The Armature: the creation of a large four block open space with mixed-use buildings fronting the park. This space provides outdoor recreation for the neighbourhood with play space, informal gathering space, and programmed space. Some mixed-use development will occur directly on the Armature to add additional programming and activity to the park. On a smaller scale in Winnipeg, the large medians along Broadway are often overlooked. Given the number of people that work and live in Downtown, these underused and poorly maintained medians may benefit from similar programming and activity in The Quarters. Consideration can also be given to



New townhousing development will soon be fronting onto existing back lanes in The Quarters

converting some surface parking lots into urban park space to add attractive public space in Winnipeg.

Sustainable Building Design

Winnipeg may look to building design guidelines in The Quarters or even local examples such as Downtown Winnipeg's Manitoba Hydro and Mountain Equipment Co-Op when it comes to sustainable building. In The Quarters, buildings will be designed to be durable and adaptable to changes. Multiple building uses can be achieved with moveable walls and under-floor air systems to significantly reduce costs. Buildings will also include energy efficiency measures. Guidelines specify furnishings with efficient fixtures and appliances to reduce energy use.

Management techniques around the buildings include maximizing vegetated areas and permeable surfaces, rain gardens to retain and clean runoff water, green roofs, and cisterns to store rainwater. To reduce potable water consumption, buildings will install efficient fixtures and systems to recycle greywater and rainwater. This water may be reused in irrigation, to flush toilets, and in water features such as ponds and fountains. Decreasing water

use in buildings will allow the existing sewer-line capacity to support an even higher level of density in The Quarters. In cold winter climates such as in Edmonton, higher density and closer building placement may also help to reduce heat loss and improve energy efficiency.

Where possible, building materials are to be sustainably grown or recycled rather than new materials from non-renewable resources. The Quarters Urban Design Plan specifies certain ecologically sustainable and non-toxic building materials to be used. Regional materials are also encouraged and are defined by materials that have not traveled more than 800 km by truck or 2400 km by rail.

Creating Incentives

The City of Winnipeg should consider methods of implementing incentives and policy tools to motivate local development and to encourage development to use sustainable design practices. This strategy may help add more infill development to Winnipeg's Downtown, especially given that development guidelines and design reviews in Winnipeg can be a lengthy process. To achieve this, The City of Edmonton will be removing obstacles in



The Quarters that would otherwise prevent developers from implementing sustainable construction. For example, Edmonton will be fast-tracking all building approvals in The Quarters by granting priority status and rapidly processing developments. Edmonton will also implement density incentives that permit developers to increase the maximum square footage on a piece of property if they meet certain green building criteria. The seven environmental design criteria that developers may pursue include design, energy, water, matter, air, movement, and community. Points are awarded for meeting certain requirements and can be exchanged for density.

Involving the Public

With any planning projects, it is essential to carry out public participation at the start of the planning process. Local stakeholders and residents always have a wealth of knowledge and experience of their neighbourhood to contribute. As discussed earlier, public engagement was integrated throughout the course of the planning agenda for The Quarters. Engaging the public from the beginning reduces future conflicts that may occur and prevents potentially slowing down

the planning process.

In the case of The Quarters, however, a lesson to be learned is that occasionally it is beneficial to keep a low profile during the initial planning stages since speculation can inflate land prices. This may restrain certain proposals of the project from being carried out.

Future Considerations

The Quarters was a project that brought together the community and designers of all expertise. Planning at scales such as The Quarters is always a great learning experience even for senior planners. There are definitely many lessons to be learned from this project and considerations to take into account for future planning processes.

Creating a Strong Vision:

From the start, it is important to create a strong vision that can be referred to, especially in times of uncertainty. The Vision for The Quarters provided clear guiding principles and implementation strategies to ensure that the plan did not stray away from its goals.



A panoramic view showing the new skyline that The Quarters will add to Downtown Edmonton.

Flexibility:

While working within certain parameters and the vision, the plan must be flexible. For example, when the lots that were originally intended to be converted to pathways were part of consolidated lots or lots that were not for sale, adjacent lots were used.

Encouraging Sustainability:

There are legal issues with enforcing sustainability beyond the building code. Hence, creating incentives and policy tools may help to encourage development to use sustainable design practices.

Social Issues:

The public is often aware of the social issues facing lower income residents in their community. However, it is municipal and provincial governments who must take steps to ensure that gentrification does not displace people as an area is revitalized.

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Flexibility in acquiring available lots and setback requirements has resulted in more interesting non-linear pathways through neighbourhood blocks with opportunity for landscaping and spaces for activity.