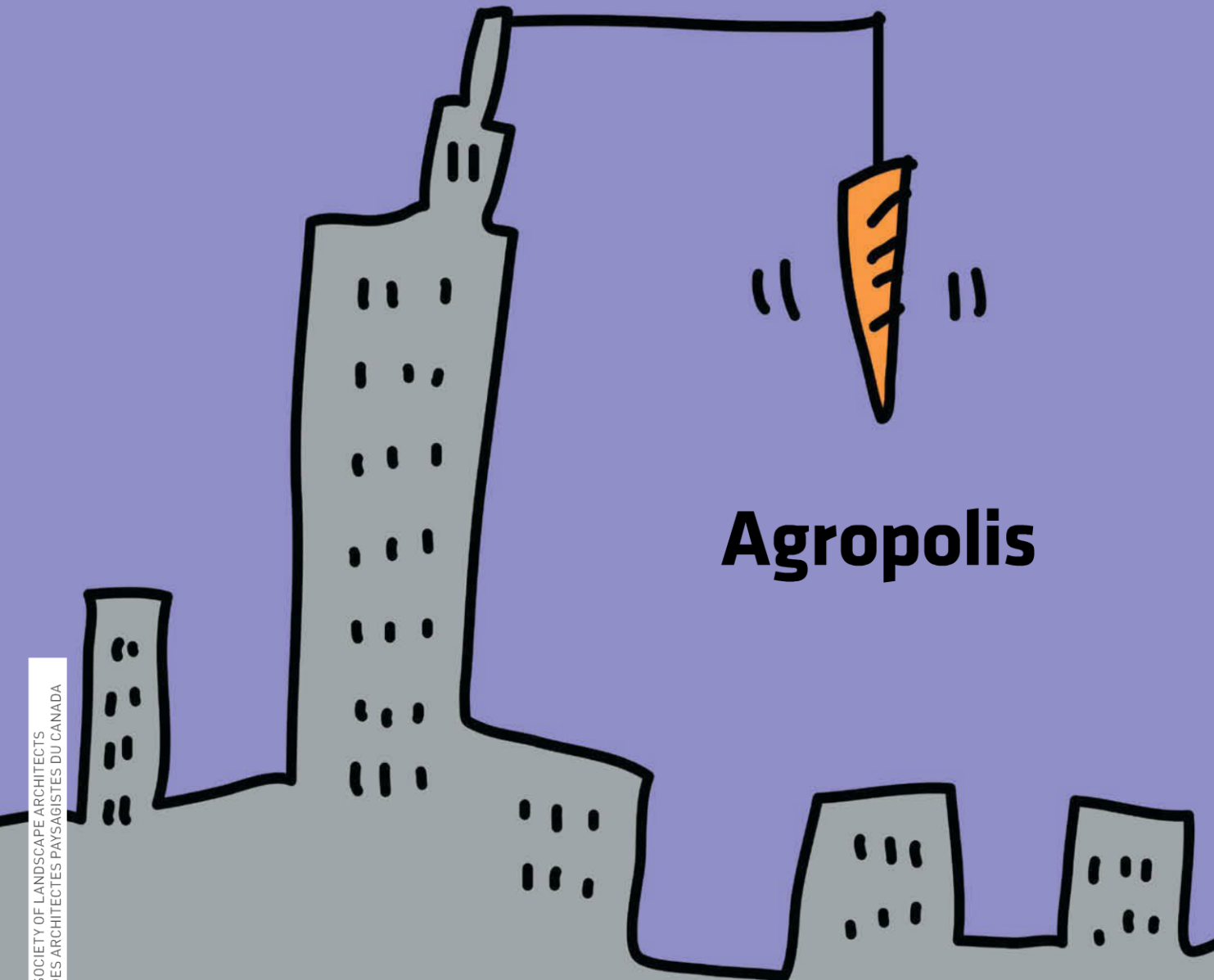


# LANDSCAPES PAYSAGES

LANDSCAPE  
ARCHITECTURE  
IN CANADA

L'ARCHITECTURE  
DE PAYSAGE  
AU CANADA

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**Agropolis**

MICHAEL MAGNAN

# THE ORCHARD ON TWELFTH

HIGH RISE DEVELOPMENT MEETS URBAN AGRICULTURE





FR\_RESUMÉ

UN VERGER ENTRE DEUX TOURS

Quand le promoteur de condos Brad Lamb a fait l'acquisition d'un site jouxtant le Calgary Saddledome pour y ériger deux tours de 31 étages, il a lancé ce défi à O2 Planning and Design : « Pouvez-vous m'intercaler un verger? »

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**BRAD LAMB IS** a successful condominium developer who has a reputation for advocating good urban design. Over a year ago, he purchased a site near the Calgary Saddledome where he planned to build two 31-storey towers, with 432 residential units and a mix of commercial, retail and residential amenities on the ground floor. It sounded like a typical inner city condominium development until he came to O2 Planning and Design and popped this question: "Can we grow an apple orchard between two high rise towers?"

The answer to Lamb was an enthusiastic "yes", provided a few critical conditions were met. First, an orchard requires a sizeable area of the site to be dedicated to landscape. Second, the parkade slab upon which the orchard would rest would need to be lowered, and would require additional reinforcement to accommodate heavy fruit-laden (and possibly snow-laden) trees. Finally, the orchard would have to be properly maintained by a qualified orchard steward in perpetuity. Lamb agreed, and O2 Planning + Design got to work.

**NAME THE CITY**

From an urban design perspective, the Orchard on Twelfth represents a citizen-friendly approach to city building and a new trajectory in urban development. The notion of combining mixed-use development, publicly accessible open space, and urban permaculture at this scale has never been attempted in Calgary. In fact, prior to launching sales, Lamb conducted a survey of over 2,000 Canadians and Americans. He asked people to speculate in which city the development would be built. Most participants named Portland, Vancouver, Toronto or NYC; only a handful chose Calgary.

In the same survey, 90 per cent of the Canadians supported the idea of growing food in the inner city; 93 per cent said that cities need to be more creative with inner city green space, and just as many said they wanted to see more green space downtown.

The survey confirms that the current model of residential development in inner cities throughout North America needs some serious rethinking. In most large municipalities, inner city land values have risen to such heights that the only seemingly economical approach to development is the ubiquitous tower and podium typology. As a result, inner cities across the continent are being generically urbanized. In our office, a few of us have started to call this "inner city sprawl". At the same time, with open space increasingly hard to come by, yet so highly valued by citizens, municipalities have largely failed to develop policy mechanisms that encourage developers to set aside open space on private property.

**A DENSITY BONUS THAT WORKS**

Thankfully, the City of Calgary's Land Use Bylaw contains a progressive bonusing structure that offers developers a density bonus for dedicating areas of properties to publicly accessible open space. For Lamb, the ability to offset the costs of constructing a high quality public orchard with increased residential density made the Orchard not just feasible, but an attractive proposition.

The City's progressive policies and the developer's desire to take a different approach to high rise development meant that the typical podium typology could be abandoned in favour of open space. Density could be shifted upward into the towers, and the orchard would serve as the focal point of the development.

As a counterpoint to the orchard, architectsAlliance have designed two sleek, modern towers that rise elegantly in Calgary's skyline. To the rear of the property, a slender thread of building connects the towers, providing residents with amenity spaces that face the rows of precisely aligned trees.







2, 3



On the ground, the building configuration helps to create a courtyard that is well suited to apple production. The site has ample southern solar exposure and is well protected from northerly winds. The southern edge of the orchard faces a busy street, and is oriented to encourage pedestrians to explore the public garden. Between each row of trees, permeable pavers form linear pathways through the orchard, leading to seating areas where residents and the public find space for quiet contemplation or small gatherings. To further activate the street frontage, O2 is working with the City's Transportation department to relocate a nearby bus stop directly in front of the orchard, complete with a large glass transit shelter.

#### **A BOLD URBAN GESTURE**

The Orchard on Twelfth is a bold urban gesture that will contribute a great deal to Calgary's urban fabric. The 96 trees, which include three varieties of apples, will be under the continuous care of an orchard steward, and should produce over 10,000 pounds of apples per year at maturity. The harvest will be shared among residents and local charities.

The Orchard sets an important precedent in North America. It demonstrates that private development which utilizes high quality urban design can deliver meaningful spaces that combine green infrastructure with local food production. By bringing together creative design, progressive planning policies and collaboration between disciplines, the Orchard on Twelfth serves as a model for enlightened urban development.

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**1** THE ORCHARD ON TWELFTH IS A HIGH QUALITY PUBLIC REALM ON PRIVATELY OWNED PROPERTY **2** THE ORCHARD, CONSTRUCTED OVER A PARKADE, WILL FEATURE PERMEABLY PAVED WALKWAYS AND DRAMATIC EVENING LIGHTING **3** THE 96 APPLE TREES WILL PRODUCE 10,000 POUNDS OF APPLES PER YEAR WHEN MATURE | **1** LE VERGER EST UN JARDIN PUBLIC ENCHANTEUR AMÉNAGÉ SUR UNE PROPRIÉTÉ PRIVÉE. **2** CONSTRUIT PAR DESSUS UN STATIONNEMENT, LE VERGER SERA PARCOURU DE PAVÉS PERMÉABLES ET MIS EN VALEUR LE SOIR PAR UN ÉCLAIRAGE SPECTACULAIRE. **3** LES 96 POMMIERS, À MATURITÉ, DONNERONT 10 000 LB DE POMMES.

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