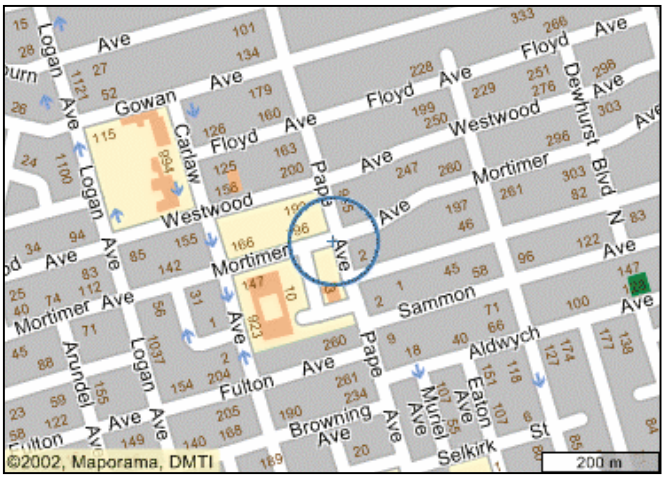
METROPOLE
consultants

Smart Development for Smart Growth

Examples of Smart Development

November 2002

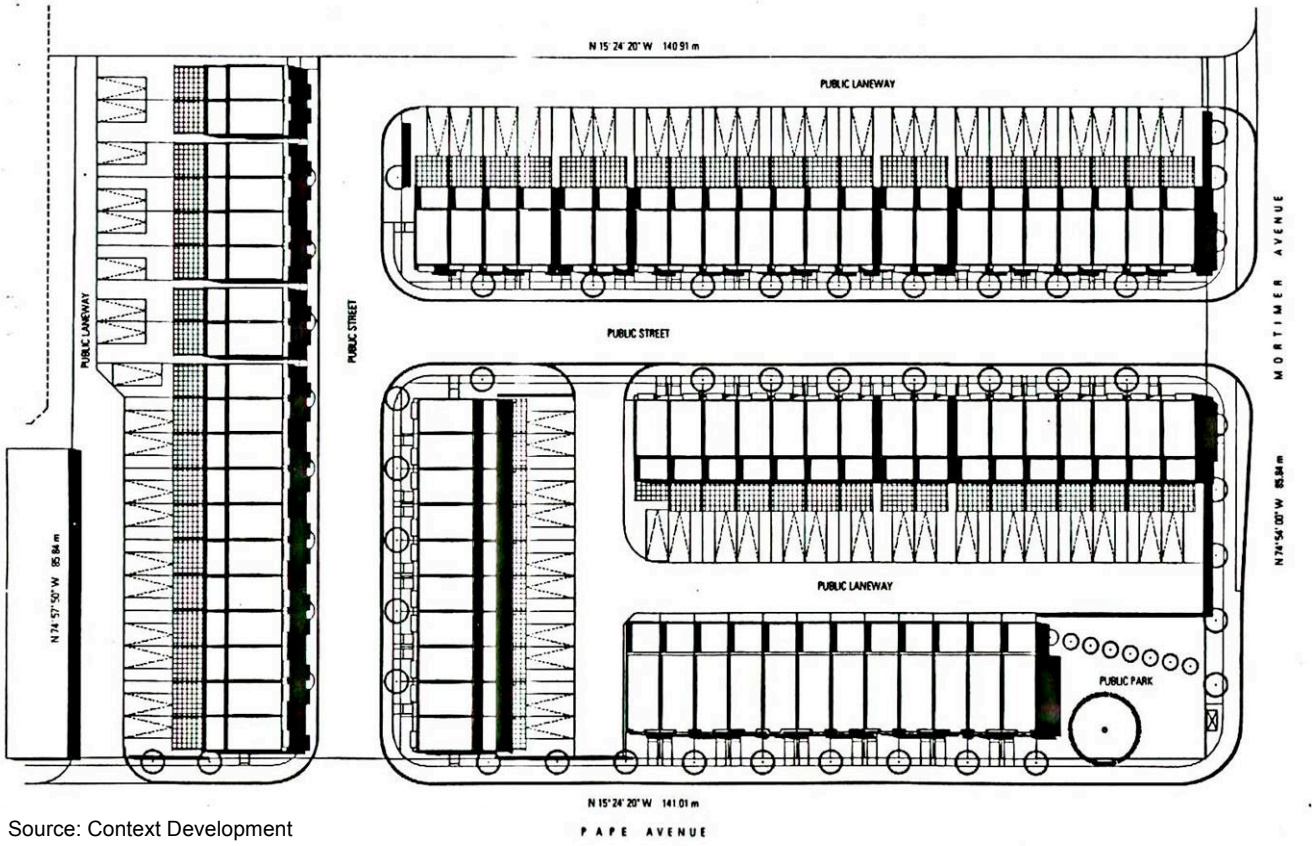
1. 3 ½ story townhouses with live-work component and alternative street design



Source: Metropole Consultants

Specifications

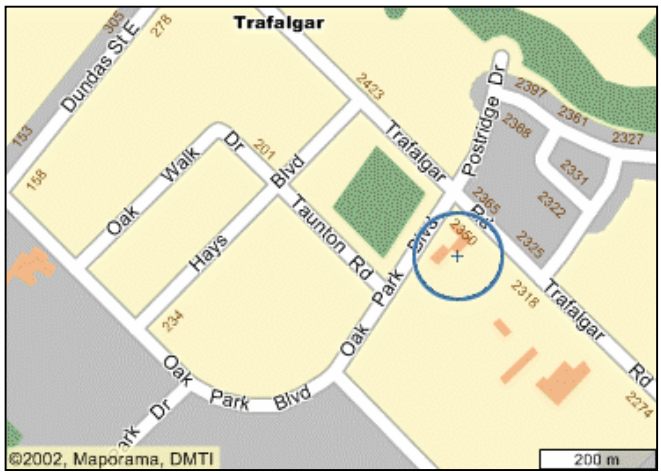
Name of project	Upper East Side
Location	Toronto ON
Architect	Architects Alliance
Form	Townhouses, some live-work
Number of stories	3.5
Height	41.5ft 12.65m
Type of construction	Wood frame
Total GFA	166.736 ft^2 15,490 m^2
Total number of units	70
Average size of unit (assuming 85% eff.)	2,025 ft^2 188 m^2
Site area	80,747 ft^2 7,502 m^2 1.85 acres 0.75 ha
Open space	359 m^2 parkette
Density in dwellings per acre and hectare	37.8 upa 93.3 uph
Density (FAR)	2.06
Use of ground floor	Residential, some live-work and retail
Staircases and elevators	Stairs in each town (1?)
Number of parking spaces	78
Type of parking	Carports and garages
Construction cost	



Source: Context Development

Source: Metropole Consultants

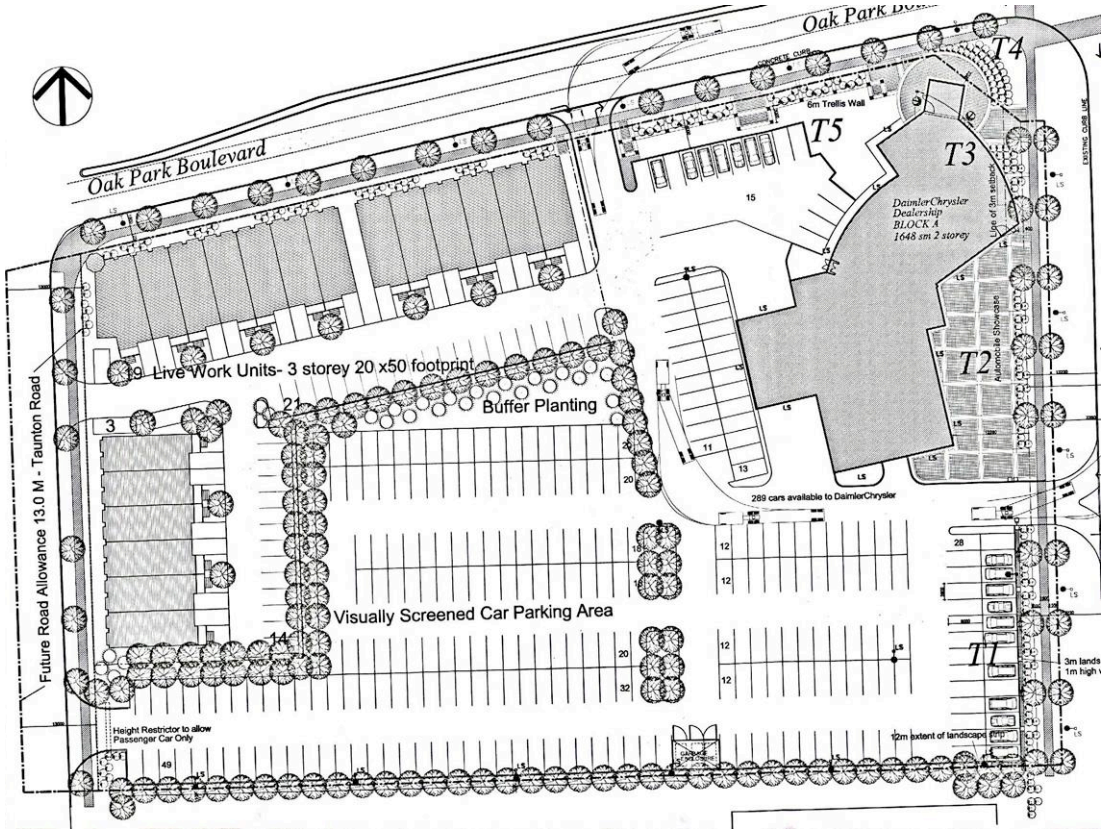
2. Three-story townhouses with live-work component on a suburban arterial



Source: Michael Spaziani Architect

Specifications

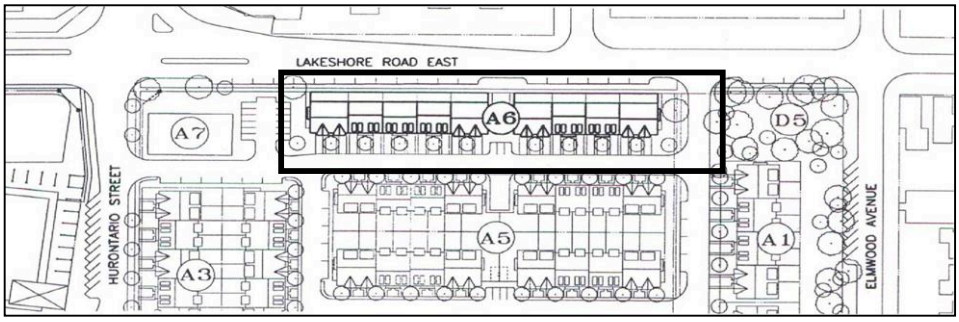
Name of project	Oak Park and Trafalgar Road (no marketing name yet)
Location	Oakville ON
Architect	Michael Spaziani Architect
Form	Live-work townhouses
Number of stories	3.5
Type of construction	Wood frame (?)
Total GFA	55,714 ft^2 5,176 m^2
Total number of units	19
Average size of unit (assuming 85% eff.)	2,492 ft^2 232 m^2
Site area	51,129 ft^2 4,750 m^2 1.17 acres 0.48 ha
Density in dwellings per acre and hectare	16.2 upa 40 uph
Density (FAR)	1.09
Use of ground floor	Residential, some commercial
Staircases and elevators	Stairs in each townhouse
Number of parking spaces	76
Type of parking	Surface, internal, driveway
Construction cost	~ $95/ ft^2 1,023/ m^2



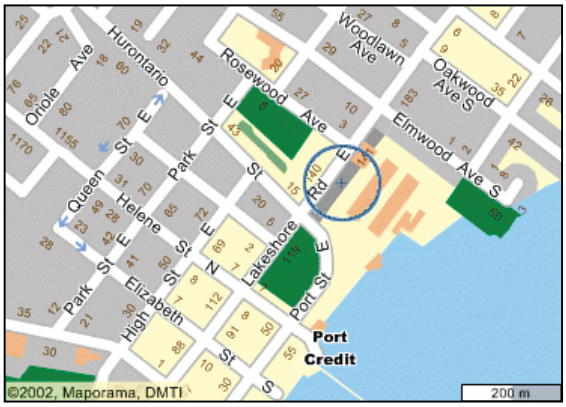
Source: Michael Spaziani Architect

3. Live-work Townhouses

Facing a main street in a small town, 18 large live-work townhouses with two parking spaces at the back but no private outdoor space.



Source: Ralph Giannone Architect



Specifications

Name of project	Port Credit Village
Location	Mississauga ON
Architect	Ralph Giannone Architect
Form	18 Live-work townhouses
Type of construction	Wood frame
Number of stories	3.5
Height	
Total GFA	54,250 ft^2 5,040 m^2
Total number of units	18 residential units and 18 commercial units
Average size of unit (assuming 85% eff.)	2,562 ft^2 238 m^2
Site area	36,048 ft^2 3,349 m^2 0.83 acre 0.33 ha
Density in dwellings per acre and hectare	22 upa 54 uph
Density (FAR)	1.50
Use of ground floor	Parking and optional commercial
Staircases and elevators	1 staircase per unit (?)
Number of parking spaces	36
Type of parking	1 indoors at grade, 1 on driveway, 0.25 off-site
Construction cost	\$95.00/ft^2 1,023/m^2

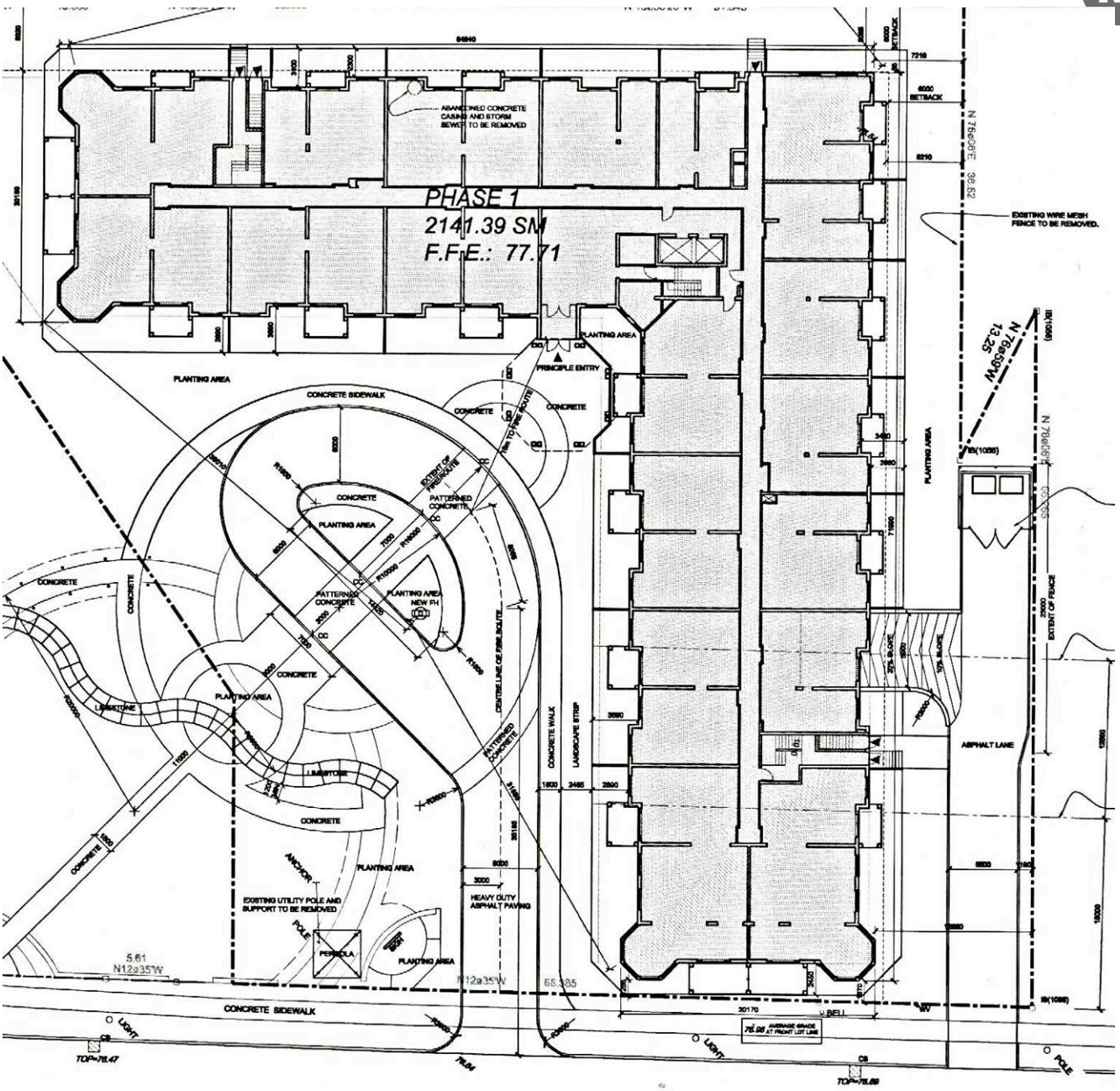
4. 4-story apartments in small town

120 adult-lifestyle units in a 4-story courtyard apartment building in the core of a small town with underground parking.

Specifications

Name of project	Harbour Walk Condominium
Location	Cobourg ON
Architect	Michael Spaziani Architect
Form	Courtyard apartments
Number of stories	4
Type of construction	Concrete
Total GFA	85,779 ft^2 5,945 m^2
Total number of units	68
Site area	63,987 ft^2 5,945 m^2 1.47 acres 0.59 ha
Density in dwellings per acre and hectare	283 upa 114 uph
Density (FAR)	1.34
Use of ground floor	Residential
Staircases and elevators	3 staircases and 2 elevators
Number of parking spaces	68
Type of parking	Underground
Construction cost	\$110/ft^2 1,084/m^2


South Elevation
MICHAEL SPAZIANI ARCHITECT INC.

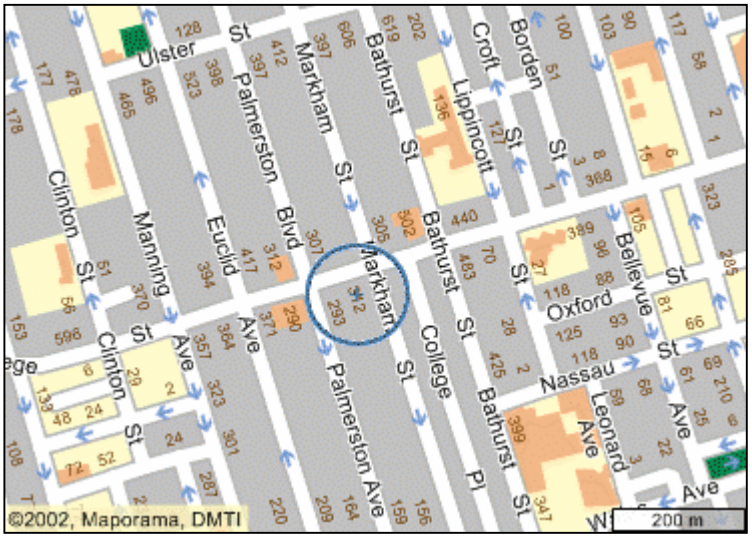


Source: Michael Spaziani Architect

5. Street-Related Mid-rise Apartment Building

On a main street, a nine-story apartment building with a narrow setback, underground parking and retail at grade.

Source: Context Development



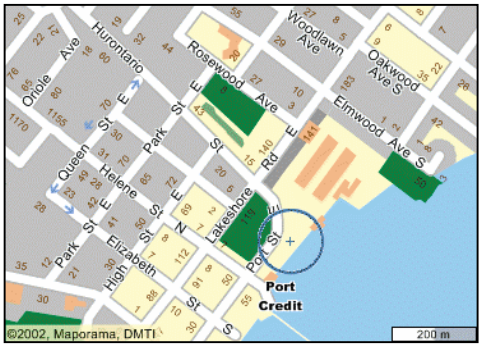
Specifications

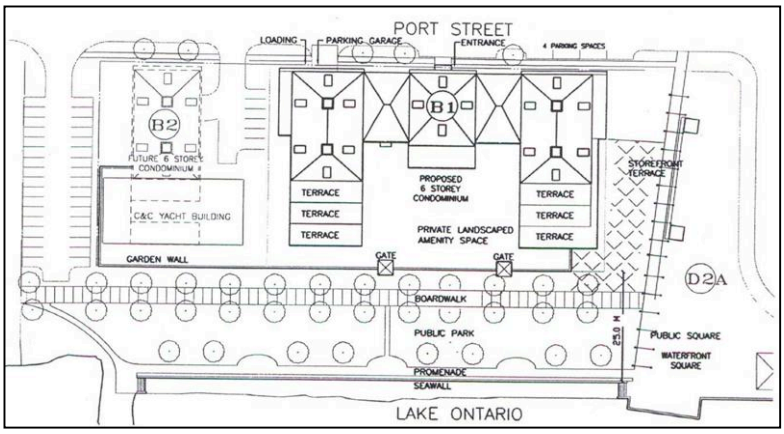
Name of project	Ideal Lofts
Location	Toronto ON
Architect	Wallman Clewes Bergman Architects
Form	Mixed-use apartment building on urban main street
Type of construction	Concrete
Number of stories	9
Height	95.64ft 29.15m
Total GFA	87,589 ft^2 8,137 m^2
Units per floor	6 to 13 (12-13 on all floors. 6 units on last two floors)
Total number of units	68
Average size of unit (assuming 85% eff.)	927 ft^2 86 m^2
Site dimensions	120 x 120ft 37 x 37m
Site area	15,005 ft^2 1,394 m^2 0.34 acre 0.14 ha
Density in dwellings per acre and hectare	197 upa 488 uph
Density (FAR)	4.94
Use of ground floor	Commercial
Staircases and elevators	3 staircases, 2 elevators
Number of parking spaces	98 (58 residents, 40 public)
Type of parking	Underground
Construction cost	\$120/ft^2 1,292/m^2

6. Mid-rise mixed use Apartment Building

Part of a street-related development in proximity to a small town's main street, a mid-rise, mixed-use apartment building with underground parking and limited commercial use at grade.

Source: Simplycondos.com





Source: Ralph Giannone Architect

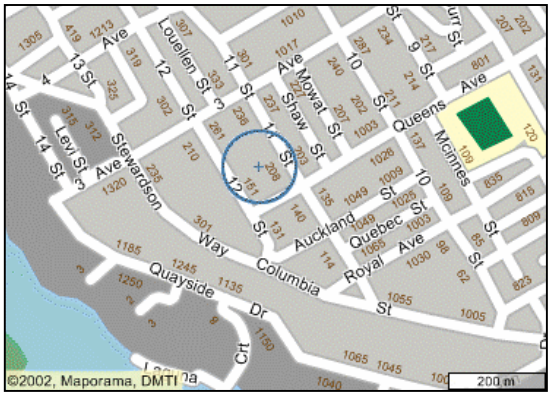
Specifications

Name of project	Port Credit Village
Location	Mississauga ON
Architect	Ralph Giannone Architect
Form	W-shaped mixed-use apartment building
Type of construction	Concrete
Number of stories	6
Height	
Total GFA	160,974 ft^2 14,955 m^2
Units per floor	6-8 ground, 13-18 upper floors
Total number of units	75
Average size of unit (assuming 85% eff.)	1,824 ft^2 169 m^2
Site area	56,069 ft^2 5,209 m^2 1.29 acre 0.52 ha
Density in dwellings per acre and hectare	58 upa 144 uph
Density (FAR)	2.87
Use of ground floor	Commercial and residential
Staircases and elevators	3 staircases and 2 elevators
Number of parking spaces	132
Type of parking	Underground
Construction cost	\$145/ft^2 1,561/m^2

7. Wood-Frame Courtyard Apartments

Three four-story wood-frame apartment buildings encircling a courtyard, with underground parking. Six live-work units.

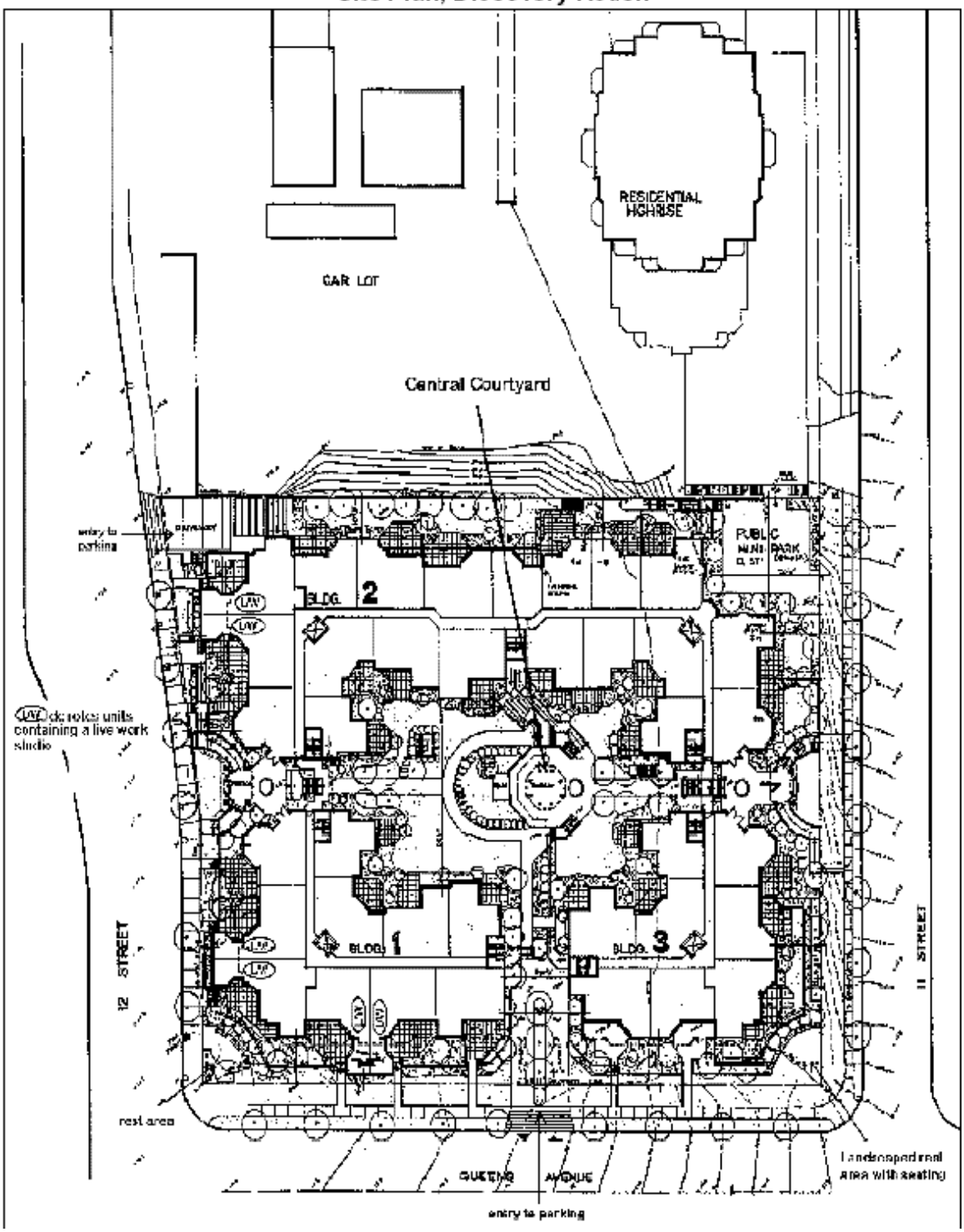
Source: Greater Vancouver Regional District



Specifications

Name of project	Discovery Reach
Location	New Westminster BC
Architect	Jan Timmer Architect
Form	Three low-rise live-work courtyard apartment buildings
Type of construction	Wood frame
Number of stories	4
Height	
Total GFA	151,125 ft^2 14,040 m^2
Units per floor	8, 10 or 20 units depending on building
Total number of units	147
Average size of unit (assuming 85% eff.)	874 ft^2 81 m^2
Site dimensions	263 x 317ft 80 x 97m
Site area	83,958 ft^2 7,800 m^2 1.93 acre 0.78 ha
Density in dwellings per acre and hectare	76.3 upa 188.5 uph
Density (FAR)	1.80
Use of ground floor	Residential, some commercial (6 live-work units)
Staircases and elevators	2 staircases and 1 elevator per building (3 stairs in larger building)
Number of parking spaces	224
Type of parking	Underground
Construction cost	\$90-95/ft^2 969-1,023/ m^2 (including parking, extra waterproofing and seismic requirements) - 1998

Site Plan, Discovery Reach

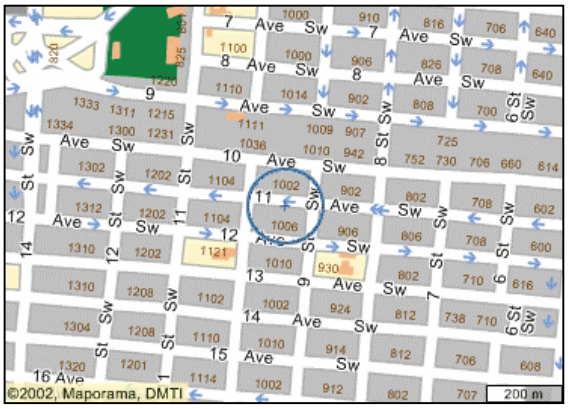


Source: Greater Vancouver Regional District

8. Street-Related Wood-Frame Apartments

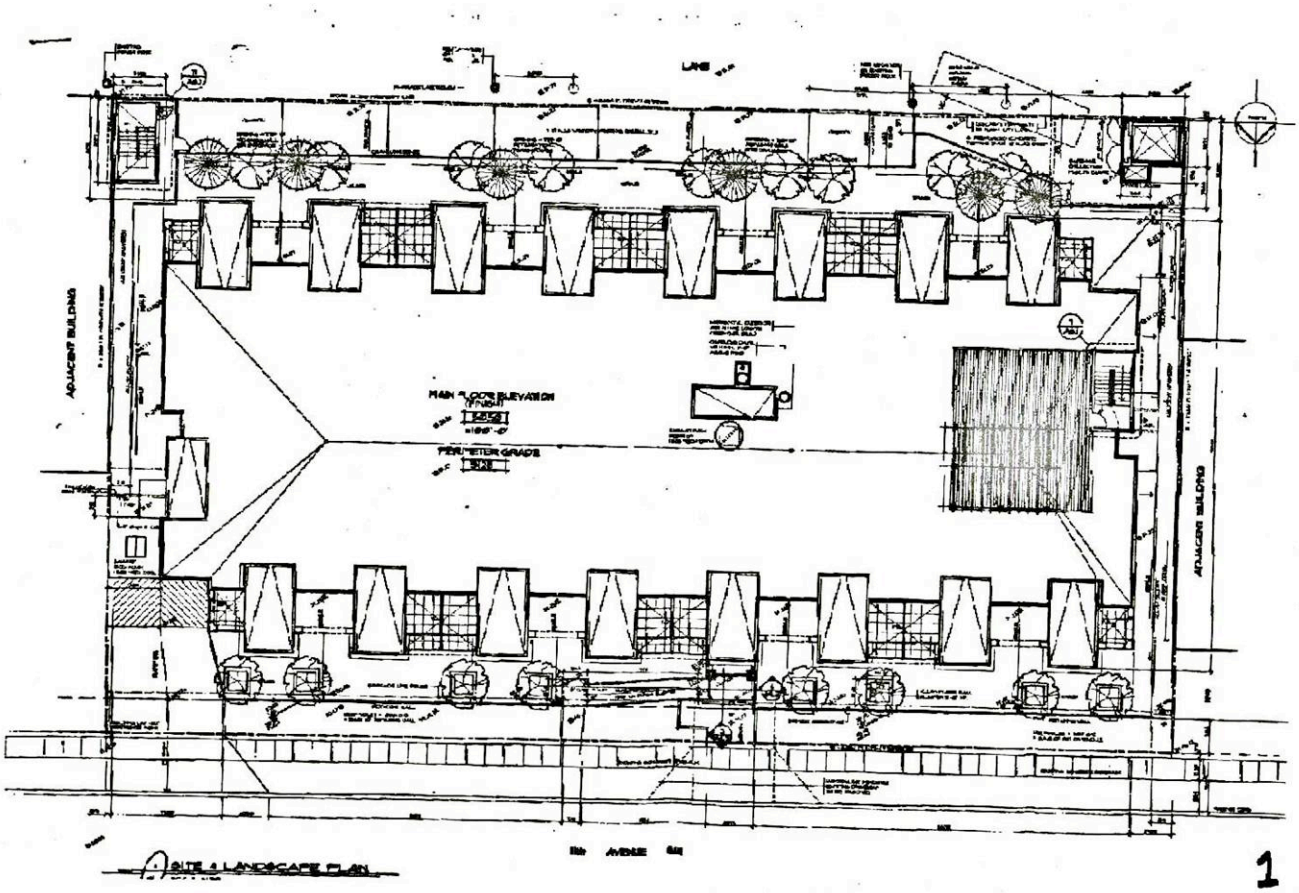
A 4.5-story rental apartment building with underground parking located on an urban street.

Source: Poon McKenzie Architects



Specifications

Name of project	The Carrington
Location	Calgary AB
Architect	Poon McKenzie Architects
Form	Apartment Building
Type of construction	Wood-frame
Number of stories	4.5
Height	47ft 14.3m
Building dimensions	92 x 205ft 28 x 62.5m
Footprint	18,860ft^2 1,752m^2
Total GFA	78.856ft^2 7,326m^2
Total number of units	80
Average size of unit (assuming 85% eff.)	838 ft^2 78 m^2
Site dimensions	123 x 225ft 37.5 x 68.6m
Site area	27,719ft^2 2,575m^2
Density in dwellings per acre and hectare	125.7 upa 310.7 uph
Density (FAR)	2.84
Use of ground floor	Residential
Staircases and elevators	2 staircases and 2 elevators
Number of parking spaces	87 (80 residents, 7 visitors)
Type of parking	Underground (residents), surface (visitors)
Construction cost	$75/ft^2 805/m^2



Source: Poon McKenzie Architects

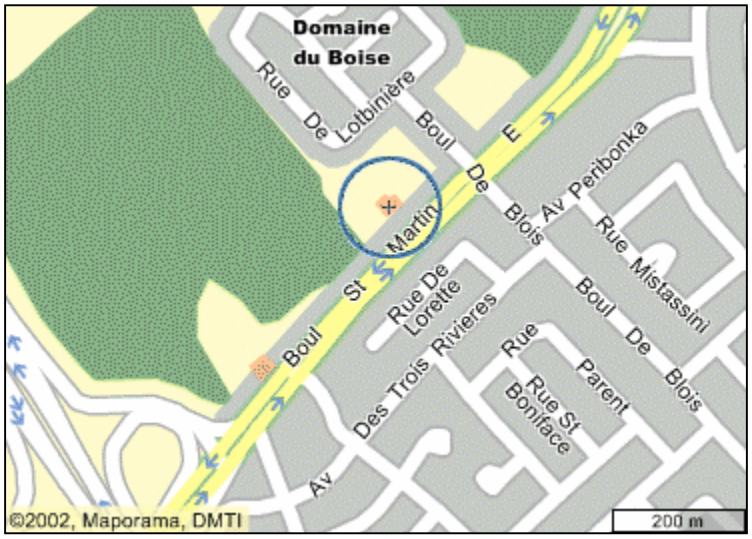
The Carrington

POON McKENZIE ARCHITECTS

9. Canadian Urban Villas

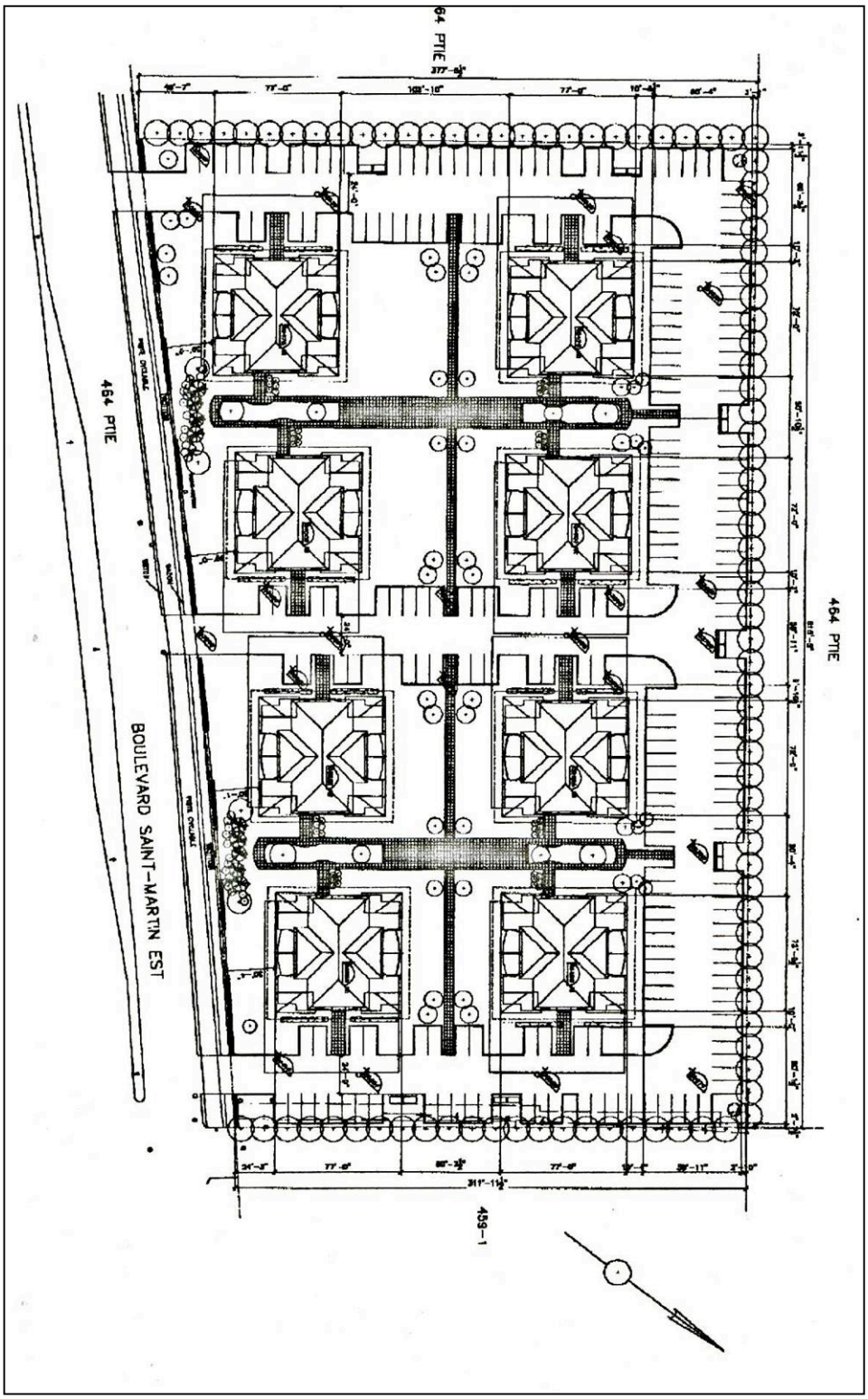
Eight five-story apartment buildings with a small footprint, reminiscent of European urban villas. These buildings are located on a suburban arterial.

Source: APCHQ



Specifications

Name of project	Le Domaine Duvernay
Location	Laval QC
Architect	Antoine Chaloub Architecte
Form	Urban villa
Type of construction	Steel frame and precast concrete
Number of stories	5
Height	56ft 17m
Building dimensions	72 x 77 ft 21.9 x 23.5 m
Footprint	5,250 ft^2 488 m^2
Total GFA	210,000 ft^2 19,510 m^2
Units per building	16
Total number of units	128
Average size of unit (assuming 85% eff.)	1,395 ft^2 130 m^2
Site dimensions	312 x 615 ft 29 x 57.1 m
Site area	211,000 ft^2 19,603 m^2 4.84 acres 1.96 ha
Density in dwellings per acre and hectare	26.55 upa 65.6 uph
Density (FAR)	1.00
Use of ground floor	Residential
Staircases and elevators	1 elevator, 2 stairs per bldg
Number of parking spaces	230
Type of parking	Surface
Construction cost	\$80/ft^2 861/m^2



Source: Antoine Chaloub Architecte

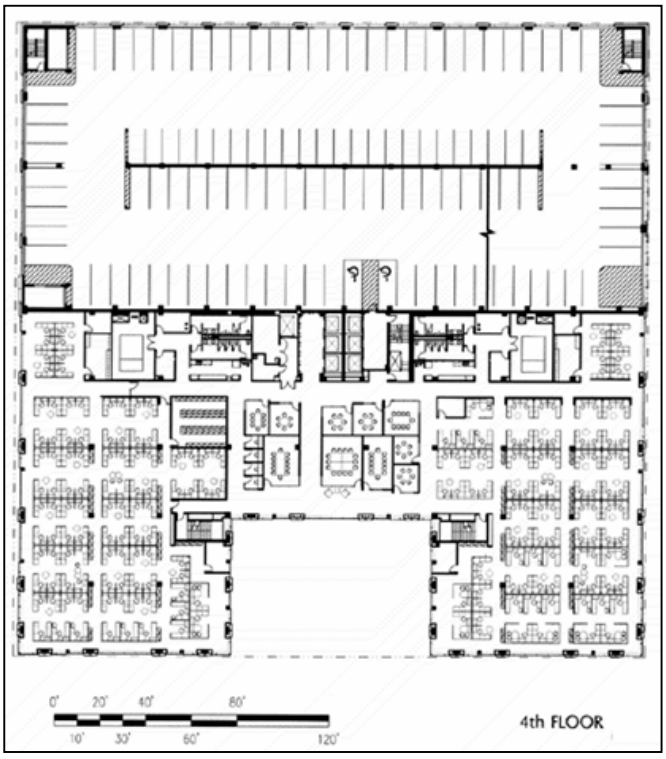
10. Land-efficient Mid-Rise Office Building

Two 6-story office buildings with integrated above-grade structured parking located in an urban area undergoing revitalisation.

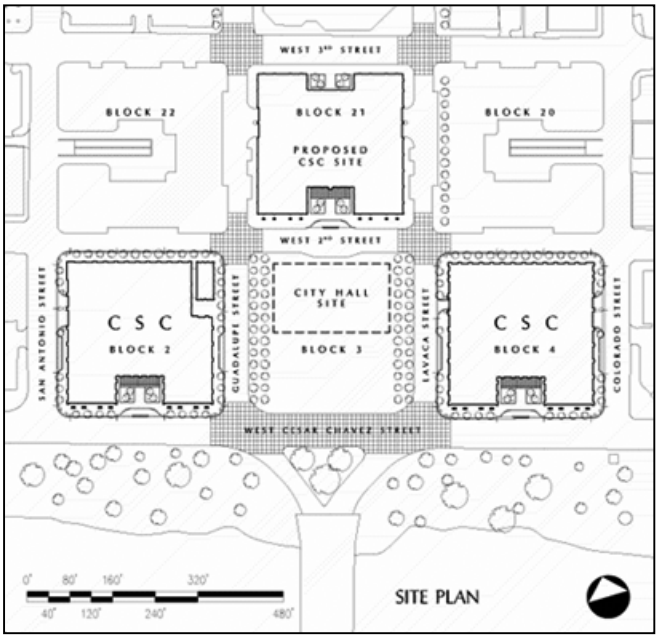
Source: Architectural Record

Specifications

Name of project	Computer Sciences Corporation
Location	Austin TX
Architect	Lawrence P. Speck Studio – PageSoutherlandPage Architects
Form	Two office buildings
Type of construction	Concrete
Number of stories	6
Height	
Building dimensions	282 x 282 ft 86 x 86 m (approx)
Footprint	79,524 ft^2 7,388 m^2
Total GFA	410,000 ft^2 38,090 m^2
Site dimensions	300 x 300 ft 91 x 91 m (approx) (each block)
Site area	180,000 ft^2 16,723 m^2 4.13 acres 1.67 ha
Density (FAR)	2.28
Number of parking spaces	1533
Parking spaces per 1000ft^2 / 100m^2	3.74 4.02
Type of parking	Structured, integrated with buildings
Construction cost	USD 65m (project cost). Assuming USD 5,000/parking space, USD 140 / ft^2



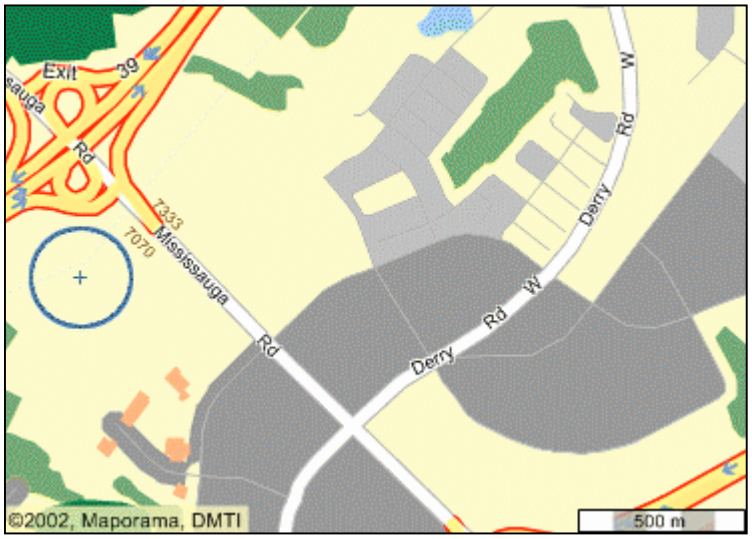
Source: Architectural Record



11. Large-Scale Suburban Office Park with Structured Parking

Two nine-story office buildings with structured parking on a large suburban site.

Source: Brigholme



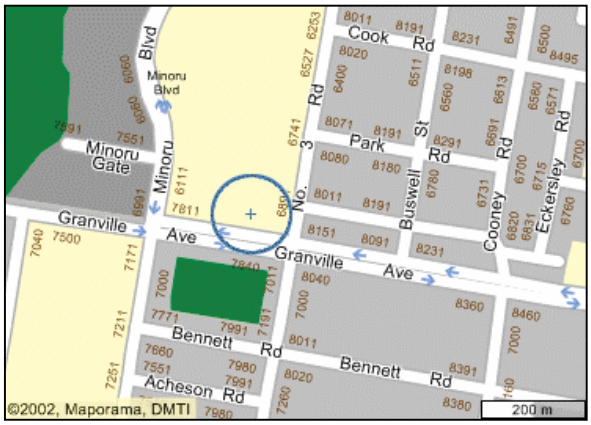
Specifications

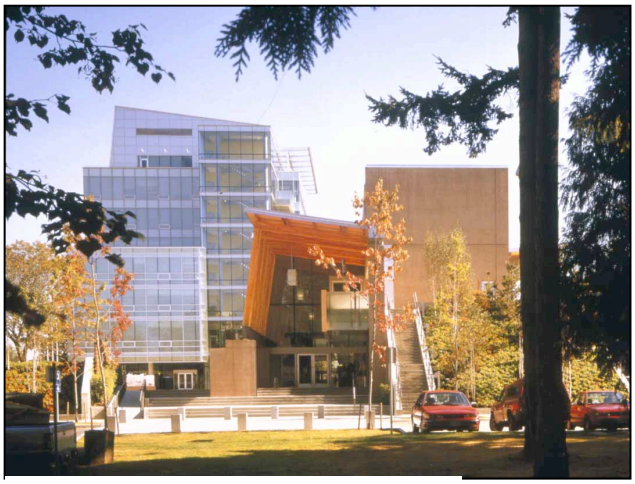
Name of project	**Royal Bank Meadowvale**
Location	Mississauga ON
Architect	Adamson Associates
Form	Office buildings
Type of construction	Steel frame (?)
Number of stories	9
Height	159ft 49m
Total GFA	820,840 ft^2 76,258 m^2
Site area	25.08 acres 10.15 hectares
Density (FAR)	0.75
Number of parking spaces	4050 (2025 were required), 1.28m sf of parking,
Parking spaces per 1000ft^2 / 100m^2	4.93 5.31
Type of parking	Structured
Construction cost	

12. Suburban Office Building, built to the street, with structured parking

An institutional office building with structured parking built right to a street corner in a mature suburb. Travel Demand Management in place to minimise parking demand.

Source: City of Richmond





Source: Architectural Institute of BC

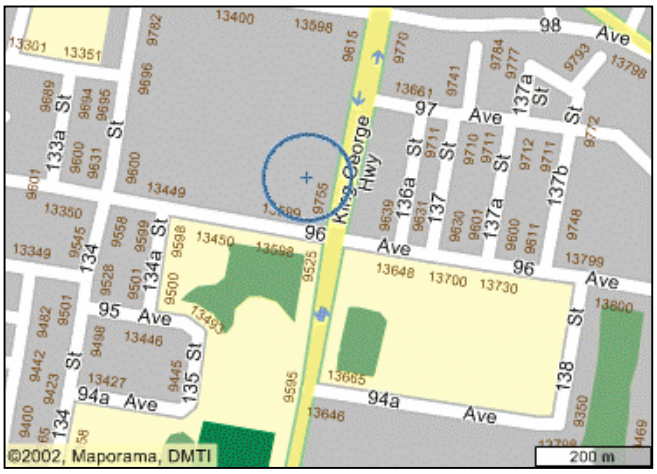
Specifications

Name of project	Richmond City Hall
Location	Richmond BC
Architect	Hotson Bakker and Kuwabara Payne McKenna Blumberg
Form	Institutional office building
Type of construction	Concrete
Number of stories	8 (tower)
Height	159ft 49m
Total GFA	120,000 ft^2 11,148 m^2
Site area	235,224 ft^2 21,853 m^2 5.40 acres 2.19 ha
Density (FAR)	0.51
Number of parking spaces	215
Parking spaces per 1000ft^2 / 100m^2	1.79 1.93
Type of parking	Structured
Construction cost	CAD 30m project cost

13. Suburban Mid-Rise Office Building with Underground Parking

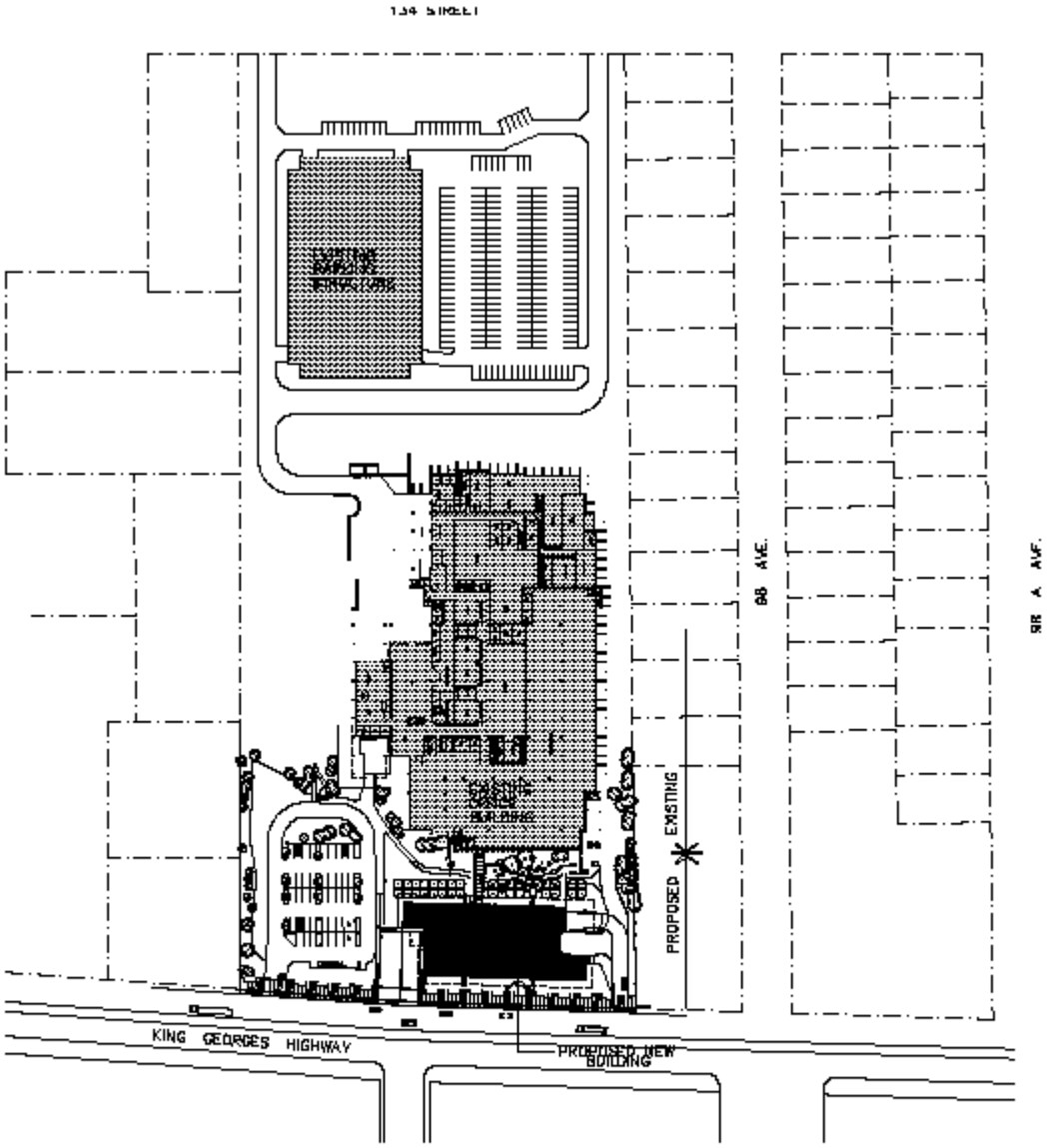
An institutional office building with “green” attributes and underground parking located on a busy suburban arterial.

Source: Busby + Associates



Specifications

Name of project	Revenue Canada
Location	Surrey BC
Architect	Busby + Associates
Form	Institutional office building
Type of construction	Concrete, curtain wall, steel frame
Number of stories	5
Height	64ft 19.5m
Total GFA	120,017 ft^2 11,150 m^2
Site area	15.38 acres 6.22 hectares (very large site with other bdlgs)
Density (FAR)	0.18 (only new) 0.54 (with existing)
Number of parking spaces	73 (183 required, 582 already provided, 135 above req't)
Parking spaces per 1000ft^2 / 100m^2	1.54 1.66
Type of parking	Underground
Construction cost	CAD 140/ft^2 1,516/m^2

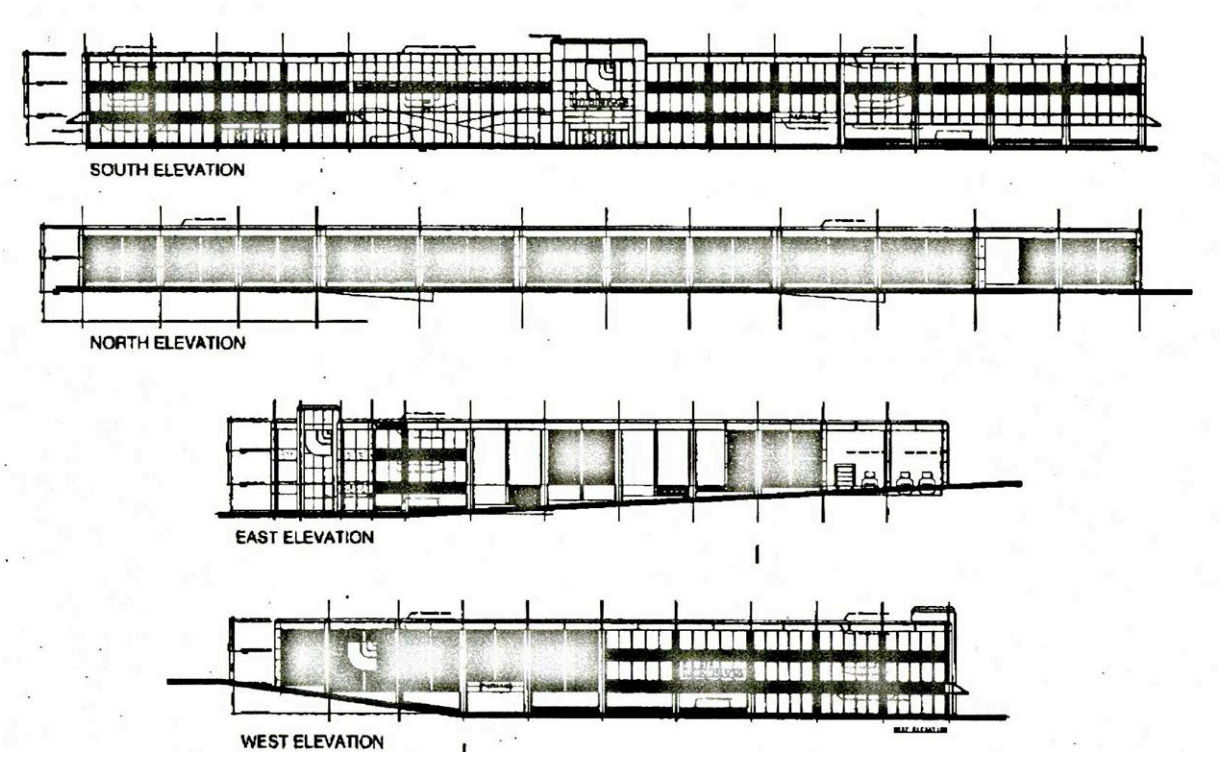


CONTEXT PLAN

BUSBY + ASSOCIATES ARCHITECTS

14. Supermarket with Underground Parking

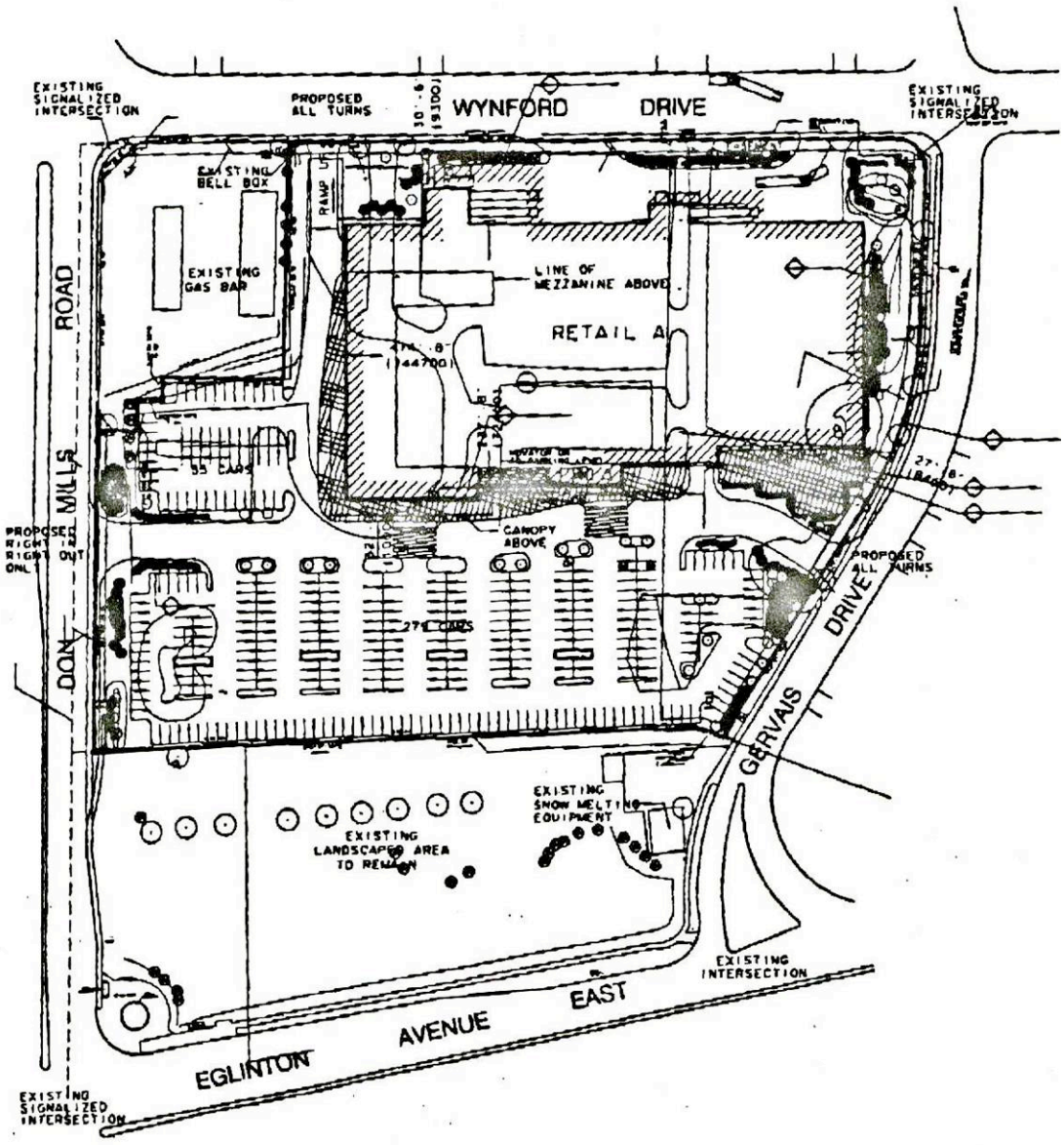
Although the displacement of some surface parking is a positive attribute which leads to increased density, other aspects of the project could have been improved upon to result in an optimal “smart growth” case study. The surface parking spaces are located in front of the store and shoppers who arrive by public transit on the main thoroughfare must walk to the store located at the back of its site. Ideally, the store should have been located right on the main street, with parking underneath and behind.



Source: City of Toronto

Specifications

Name of project	**Loblaws Don Mills and Eglinton Ave E**
Location	Toronto ON
Architect	
Form	Supermarket
Type of construction	Steel frame, concrete and precast concrete
Number of stories	1 and 2
Height	
Total GFA	157,261ft^2 14,610m^2
Site area	341,216ft^2 31,700m^2 7.83 acres 3.17 ha
Density (FAR)	0.46
Number of parking spaces	588
Parking spaces per 1000ft^2 / 100m^2	3.74 4.02
Type of parking	Underground (255) and surface (333)
Construction cost	



Source: City of Toronto

15. “Big Box” on Arterial at Street with Stacked Parking

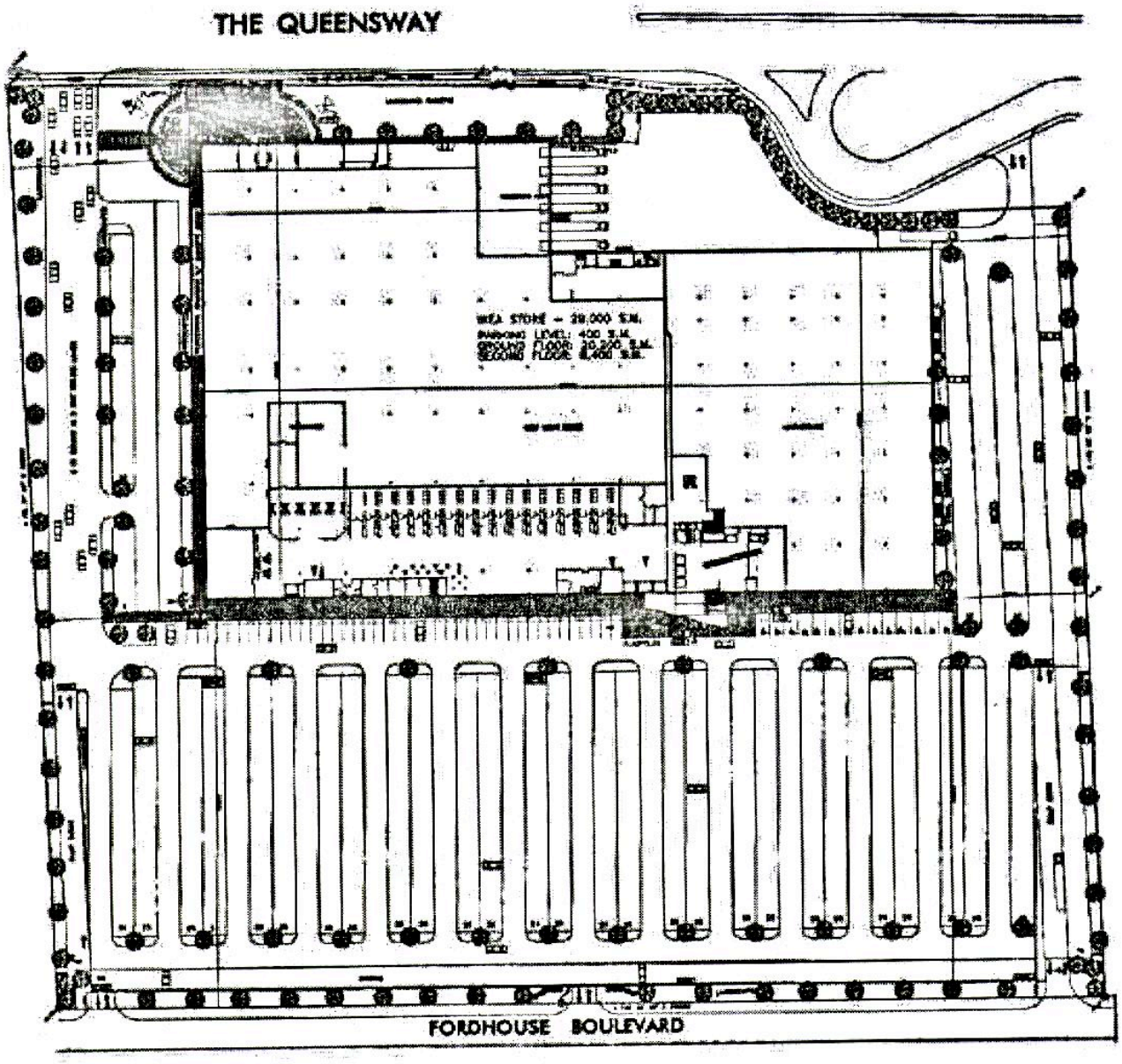
A large-scale home furnishings store located on an arterial in a mature suburb. The store fronts directly on the arterial but does not provide pedestrian access from the street. The walking distance from the street to the entrance is 275 metres, which has been flagged as a concern by city planners. However, the City obtained that the building be designed to allow the creation of an entrance on the street. The choice of location has proved to be wise, since the transit authority has stepped up its service in response to demand generated by the store.

Parking is provided in a two-level structure. The reason for this solution is the desire to provide about twice the amount of parking as required by the City (5.88 per 1,000 ft² of GFA).

Source: Metropole Consultants

Specifications

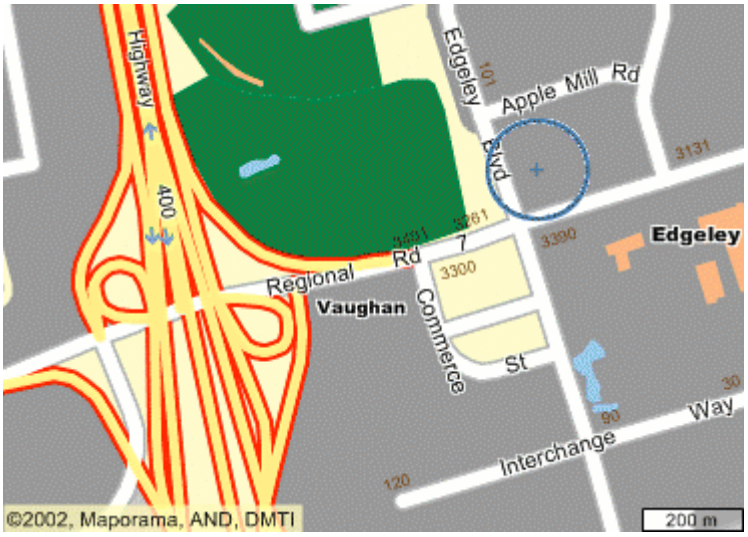
Name of project	Etobicoke IKEA
Location	Toronto ON
Architect	
Form	“Big Box” Store
Type of construction	Steel frame, concrete
Number of stories	2
Height	49ft 15m
Total GFA	312,160ft² 29,000m²
Site area	15.9 acres 6.4 hectares
Density (FAR)	0.45
Number of parking spaces	1,836
Parking spaces per 1000ft² / 100m²	5.88 6.33
Type of parking	Underground (255) and surface (333)
Construction cost	



Source: City of Toronto

16. Mixed-use “Big Box” at emerging suburban node

The possibility of adding two storeys of office space on top of a large-format retail store was investigated. The building was to address a corner with a narrow setback, windows and parking in the back to enhance the pedestrian environment.



Source: First Professional Management and Sevenbridge Developments Ltd.

Source: First Professional Management and Sevenbridge Developments Limited