

**PROGRAM**  
**MULTIDISCIPLINARY DESIGN COMPETITION**

**ZONE DE RENCONTRE SIMON-VALOIS**  
**DEVELOPMENT OF SHARED STREETS ALONG**  
**RUE ONTARIO AND AVENUE VALOIS**



2017/09/11





**MONTRÉAL**  
UNESCO CITY  
OF DESIGN

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This competition program was produced by the consulting firm Atelier Christian Thiffault, supported by a steering committee of representatives from the borough of Mercier-Hochelaga-Maisonneuve, the Direction des transports, and Montréal's Bureau du design.

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# TABLE OF CONTENTS

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<b>1. BACKGROUND</b>	<b>6</b>	<b>3. DEVELOPMENT CONTEXT</b>	<b>16</b>
1.1 Preface	7	3.1 History of neighbourhood	17
1.2 Site location and development perimeter	8	3.2 Place Simon-Valois and Promenade Luc-Larivée	18
		3.3 Transitional work done for the PIRPP program	21
		3.4 Urban landscape	22
		3.5 Urban fabric	22
		3.6 Business dynamic	23
		3.7 Locals and users	23
<b>2. VISION AND OBJECTIVES</b>	<b>10</b>	<b>4. FUNCTIONAL AND TECHNICAL REQUIREMENTS</b>	<b>24</b>
2.1 Project vision	11	4.1 Geometry and configuration of development	25
2.2 Anticipated development	12	4.2 Free and efficient movement	25
2.3 Objectives	15	4.3 Events and attractions	26
		4.4 Vegetation	27
		4.5 Expansion of grocery store adjacent to site	28
		4.6 Materials and street furniture	28
		4.7 Lighting and safety	29
		4.8 Universal accessibility	29
		<b>5. RESTRICTIONS</b>	<b>30</b>
		5.1 Signage	31
		5.2 Fire safety and emergency services	32
		5.3 Components and ground anchors	32
		5.4 Public utilities and drainage	32
		5.5 Electricity	32
		5.6 Maintenance and durability	32
		5.7 Development standards	33
		5.8 Regulations and policies	33
		<b>6. IMPLEMENTATION OBJECTIVES</b>	<b>34</b>
		6.1 Construction budget	35
		6.2 Work completion schedule	35
		<b>7. APPENDICES</b>	<b>36</b>
		<b>8. REFERENCES</b>	<b>38</b>

# BACKGROUND

- 1.1 Preface
- 1.2 Site location and intervention perimeter



## 1.1 PREFACE

Montréal has recently adopted a number of programs aimed at encouraging people to walk and cycle for short trips. In its *Transportation Plan*, Montréal states a goal of significantly reducing its dependence on cars, thereby making the city into a prosperous and environmentally friendly economic powerhouse with a high quality of life. Through its Green Neighbourhoods program (*Quartiers verts*), the city has shown a willingness to introduce the concept of shared streets to the city's road network in order to improve the layout of roads and public spaces, transforming them into accessible shared spaces.

Selected as part of the pedestrian and shared streets implementation program (*Programme d'implantation de rues piétonnes et partagées – PIRPP*), the Zone de rencontre (shared space) project aims to redefine the area around Place Simon-Valois to create a truly shared space where pedestrians are permitted to walk on the road and have priority over vehicles. The PIRPP initiative aims to accelerate the implementation of pedestrian and shared street projects in order to significantly improve the safety, convenience, and appeal of public spaces, thereby creating a favourable environment for active transportation. The principles of the program are as follows:

- transform streets into shared spaces that exemplify neighbourhoods' identity and vitality,
- increase the amount of public space dedicated to pedestrians and implement conditions favourable to walking,
- involve the community in such transformations to create a greater sense of ownership of these projects,
- develop the city's know-how and apply best practices for the development of pedestrian walkways and shared streets.

Initially, the program favours the construction of transitional structures for the first two years. This allows their relevance and citizens' satisfaction with them to be evaluated before permanent structures are put in place.

The first two transitional phases explored several road-closure scenarios and demonstrated the enthusiasm of various community stakeholders for a shared-street project. Various consultations of citizens and merchants indicated that there is interest in a shared-street project that can potentially improve the safety and convenience of movement in the area.

## 1.2 SITE LOCATION AND DEVELOPMENT PERIMETER

### Location of development

The development site is located on the Island of Montréal in the borough of Mercier–Hochelaga-Maisonneuve, and occupies a central position in the Hochelaga-Maisonneuve neighbourhood (figures 1 and 2). More specifically, it is located in the vicinity of Place Simon-Valois at the intersection of:

- Rue Ontario and the commercial promenade of the same name,
- Avenue Valois,
- the Luc-Larivée pathway (formerly a Canadian National rail line).

The surroundings are characterized by the presence of commercial and residential buildings (Figure 3). The core of the development site – the intersection of Rue Ontario and Avenue Valois – is bordered by:

- Place Simon-Valois (northeast corner);
- Métro grocery store (southeast corner);
- A condominium project with a commercial ground floor (southwest corner);
- National Bank (northwest corner).



Figure 1 : Project location, Rue Ontario, and the borough of Mercier–Hochelaga-Maisonneuve, with the Island of Montréal for scale.

### Development perimeter

The development perimeter extends over a distance of about 110 metres along Rue Ontario, between Rue Nicolet and Avenue Bourbonnière, as well as 110 metres along Avenue Valois (Figure 3). It includes all of the public space (i.e., roads and sidewalks). The shared space, along with its entrance and exit thresholds, will fall within these borders.

Place Simon-Valois is not part of this competition. However, solutions for replacing the Onyx cube lamps and upgrading the lighting structures (Section 4.8) are requested and could potentially evoke the design of the shared space and the square.

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#### Information about the development perimeter

Approximate area: 3,750 square metres

#### EXISTING DATA

##### Avenue Valois

Approximate length of portion involved: 110 metres

Roadway width: 9 to 10.5 metres

Width of existing sidewalks: about 4 metres

Road direction: one-way south, with bike lanes

Parking: parking lanes on either side, taxi zone (3 spots) and BIXI station

Speed limit along portion involved: 30 km/h

##### Rue Ontario

Approximate length of portion involved: 110 metres

Roadway width: about 12 metres

Width of existing sidewalks: variable, between 3.5 and 5 metres

Road direction: two-way

Parking: parking lanes on either side

Speed limit along portion involved: 30 km/h



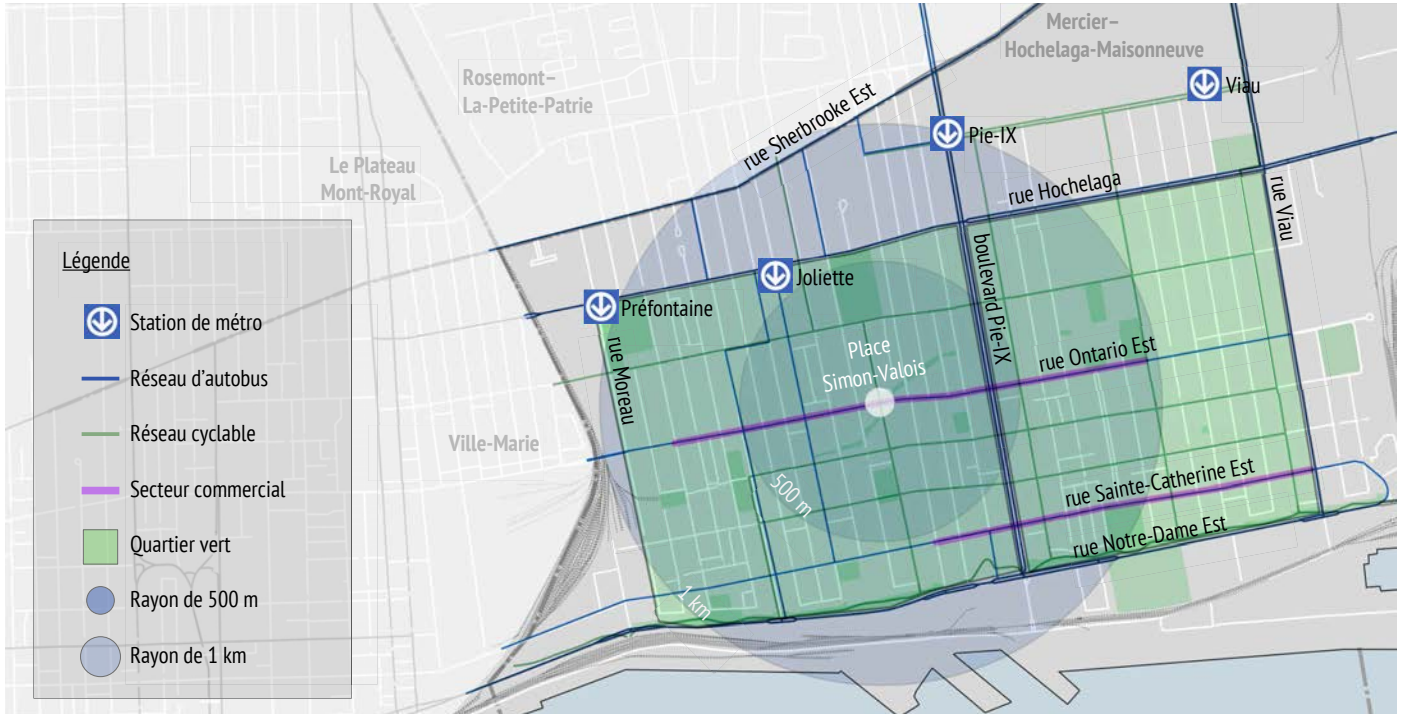


Figure 2 : Site location within the Hochelaga-Maisonneuve neighbourhood. The “green neighbourhood” indicated in the legend refers to the eponymous program (see Section 1.1).



Figure 3 : Location of site in its immediate surroundings. Source: Google

- ① •• Luc-Larivée linear park
- ② Place Simon-Valois
- ③ Métro grocery store (existing building without expansion)
- ④ Condos with commercial ground floor
- ⑤ National Bank
- ⑥ Bistro Le Valois
- ⑦ Intersection at the core of the Zone de rencontre Simon-Valois projet
- ⑧ Development perimeter

# VISION AND OBJECTIVES

- 2.1 Project vision
- 2.2 Planned development
- 2.3 Objectives



## 2.1 PROJET VISION

### Revitalizing a neighbourhood

The Hochelaga-Maisonneuve neighbourhood is undergoing a social and urban transformation. Its rich industrial heritage, vitality, and proximity to downtown are today attracting new residents and businesses, contributing to the area's social diversity and an increasingly prosperous local economy.

Efforts to revitalize the Ontario/Valois sector began in the 2000s with an intense period of city planning, followed by the creation of Place Simon-Valois and the Luc-Larivière linear park along the former railroad right-of-way. The new public space and pedestrian link encouraged real-estate development and increased the population density in the area. Today, Place Simon-Valois is considered the cultural and commercial epicentre of the Hochelaga-Maisonneuve neighbourhood; it is a daily destination for many residents and hosts numerous public events.

As a follow-up to these enhancement efforts, the borough is launching a Canada-wide call for proposals to transform the surroundings of Place Simon-Valois into a “zone de rencontre” by creating two stretches of shared street along Rue Ontario and Avenue Valois.

### “Zone de rencontre” or shared space

A “zone de rencontre” is a legislated concept in European countries such as France, Belgium, Switzerland, and Austria that designates a lane or lanes of roadway open to all users but where pedestrians have priority and where the speed limit is 20 km/h. Given the speed limit, these spaces are generally limited in length and are implemented in areas with especially high foot traffic and significant local activity. Such spaces have various names in English-speaking countries, including the term used in this document: “shared space.” The objectives of developing a shared space include improving traffic conditions and safety of movement, urban revitalization, and neighbourhood enhancement.

### Shared streets

In Québec, the term *rue partagée*, or “shared street” is used to define the concept of the shared space zone. As set out by the Québec roundtable on road safety (*Table québécoise de la sécurité routière*), the main characteristics of a shared street are as follows:

- pedestrians have priority on the entire roadway;
- users of the space must act in a prudent and respectful manner toward other more vulnerable users;
- the speed limit is 20 km/h,
- unless otherwise indicated, cyclists are permitted to ride in both directions on one-way shared streets;
- the design is consistent with the concept, taking into account pedestrians' priority and ensuring the comfort and safety of their movement, in particular those with reduced mobility.

Québec's current legal framework does not set out traffic rules specifically adapted to such spaces. Amendments to the Highway Safety Code (HSC) and signage standards are planned in the near future to regulate the shared-street concept.

### Strength of design concept

The Zone de rencontre Simon-Valois project is one of the flagship projects of the PIRPP. The competition sponsors hope that the project will serve as a model and inspiration for future shared-street developments in Montréal.

The proposed concept must present ingenious solutions for a functional and safe design that takes a sensible approach to universal accessibility.

## 2.2 ANTICIPATED DEVELOPMENT

The competition is aimed at the development of the public right-of-way outlined by the development perimeter (Section 1.2). The planned development is as follows:

- Development consistent with the principles of shared streets.
- Develop entrance and exit thresholds for the shared space (Figure 4).
- Develop the space for functional and safe day-to-day use.
- Develop the site such that its accommodation capacity can be optimized by closing the roads to vehicle traffic in various ways.
- Propose designs consistent with the speed limits within the shared space (20 km/h) and on the streets approaching and leaving the zone (30 km/h).
- Integrate design principles that ensure universal accessibility within the context of the shared street (see Appendix 7.3).

The measures must include a consideration of road and sidewalk geometry; ground surface treatment; materiality; lighting; and the placement of equipment, furniture, and vegetation. With the exception of replacing the Onyx light cubes and bringing the lighting structures up to standard (Section 4.8), no major changes to Place Simon-Valois or private property (e.g., building facades) should be proposed.

The map below illustrates the development perimeter, including the borders of the shared space and its entrance and exit thresholds.

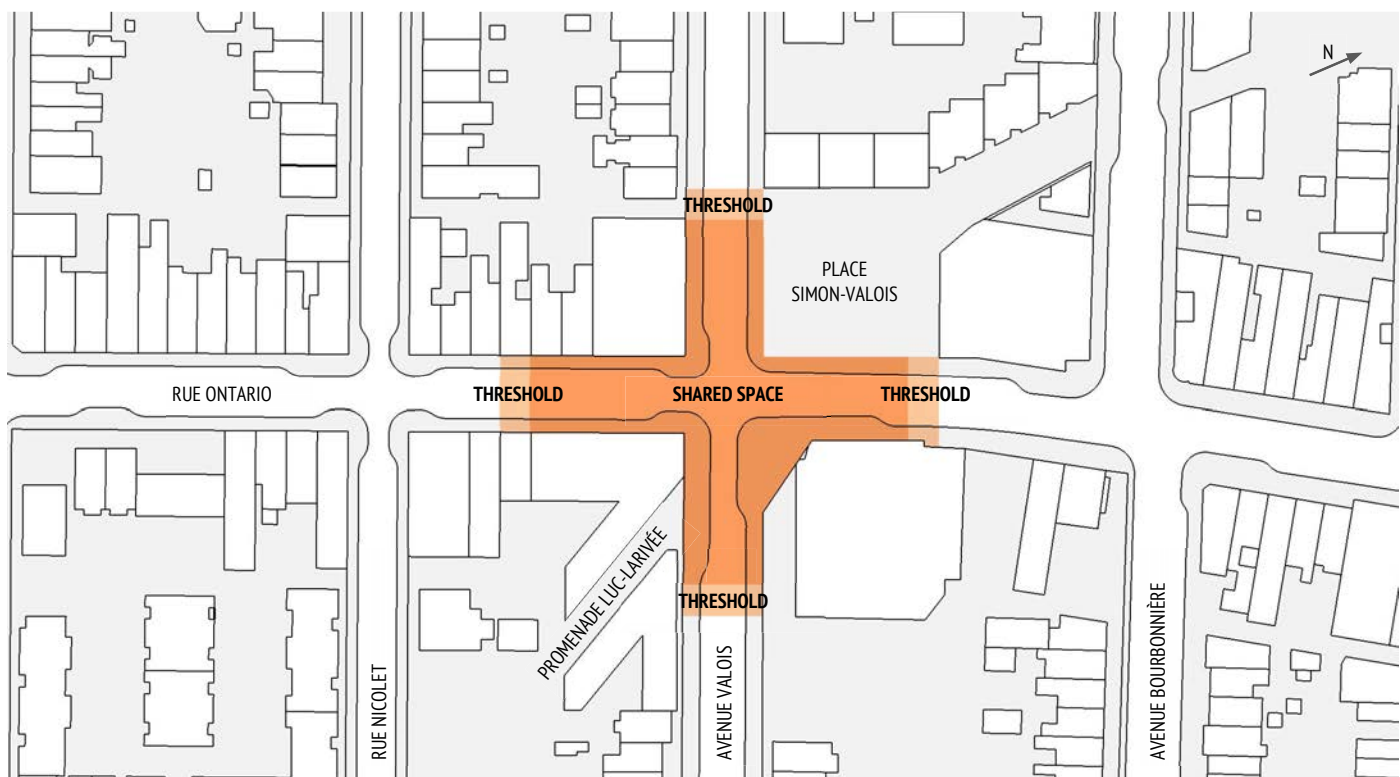


Figure 4 : Development perimeter of the Zone de rencontre Simon-Valois, including the four (4) entrance and exit thresholds.

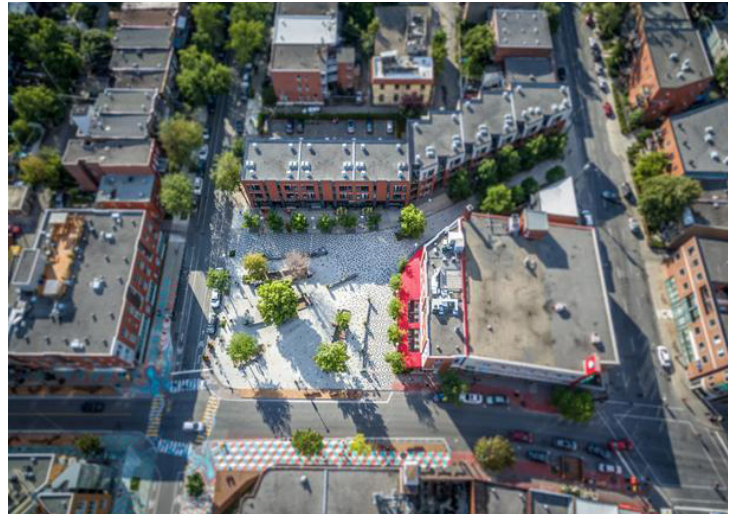


Figure 5 : Aerial view of the intersection of Rue Ontario and Avenue Valois, with the transitional infrastructures from 2016: Design and street furniture concept by the multidisciplinary design workshop En temps et lieu, and artwork by Roadsworth.



Figure 6 : View looking south from the intersection of Rue Ontario and Avenue Valois. The sidewalk and pedestrian crossings feature the work Sexapus by artist Roadsworth, and the stage platform by the workshop En temps et lieu – transitional infrastructures from 2016. Source: Google



Figure 7 : View of Place Simon-Valois from Avenue Valois (2008).



Figure 8 : View of Place Simon-Valois from the intersection of Rue Ontario and Avenue Valois (2008).



Figure 9 : View looking east along Rue Ontario of the intersection with Avenue Valois (2014). Source: Google



## 2.3 OBJECTIVES

The primary purpose of the competition is to apply the principles of the shared street (Section 2.1) in response to the vision statement for the entire targeted development perimeter (Section 1.2).

The borough wants the new development to achieve high quality standards from the aesthetic, spatial, functional, and social standpoints. The objectives below should be used as development guidelines in creating a shared space that is safe, convenient, and versatile.

### Mobility and safety

- Create a design that makes the shared space functional and safe for all users (pedestrians, cyclists, private vehicles, heavy vehicles, etc.) in their daily activities.
- Create a design that encourages vehicles and cyclists to slow down, heightens driver vigilance, and fosters harmonious co-existence among all users.
- Create a clear and intuitive design for the entrance and exit thresholds that announces the beginning and end of the shared space.
- Fully integrate the principles of universal accessibility in a shared street setting (Appendix 7.3).
- Employ best national and international practices and contribute to the city's know-how in terms of developing shared streets.

### Appeal and convenience

- Favour human-scale, convenient, and high-quality amenities that encourage spontaneous use of the site.
- Favour amenities that encourage a diversity of uses and that contribute to the creation of an animated, dynamic, and attractive space.
- Contribute to the impact of Place Simon-Valois within the neighbourhood.
- Highlight the location's setting and uniqueness.

### Versatility

- Develop versatile amenities that can be employed in a variety of entertainment and other use-case scenarios:
  - movement and daily use (co-existence),
  - partial closure of the space for small and medium-sized events, such as business promotions or community activities,
  - complete closure of the space for large-scale urban events such as music performances, in particular for the Fête national du Québec.
- Optimize the accommodation capacity of Place Simon-Valois for each of the scenarios listed above.

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The section below draws a portrait of the Hochelaga-Maisonneuve neighbourhood and describes the setting into which the Simon-Valois shared space will be integrated.

## DEVELOPMENT CONTEXT

- 3.1 History of neighbourhood
- 3.2 Place Simon-Valois and Promenade Luc-Larivée
- 3.3 Transitional work done for the PIRPP program
- 3.4 Urbain landscape
- 3.5 Urbain fabric
- 3.6 Business dynamic
- 3.7 Locals and users





### 3.1 HISTORY OF NEIGHBOURHOOD

In the early 19th century, industries and then working-class families began to settle to the east of Montréal, which at the time extended to Rue d'Iberville. By 1845, the houses, businesses, and several institutions that formed the village of Hochelaga had been built along Rue Dézéry. Development in the area was accelerated by the arrival of the Victor Hudon cotton mill, the MacDonald Tobacco factory, and the construction of the Canadian Pacific Railway.

In 1883, the village was annexed by the city of Maisonneuve, with a goal of building a model industrial city, with parks and large gardens. Boulevard Pie-IX, lined with trees and bourgeois mansions, dates from this period. Between 1896 and 1914, the municipality flourished. Many businesses set up shop along Rue Notre-Dame, and Canadian National built the railroad that, until 2001, crossed the current location of Place Simon-Valois.

World War I ended this period of prosperity and undermined the industrial city's financial situation. In 1918, the city of Maisonneuve was itself annexed by Montréal, and the neighbourhood was given the name of Hochelaga-Maisonneuve. The 1920s, followed by the financial crash of 1929, significantly slowed development in the sector. Many factories closed and moved east of Rue Viau.

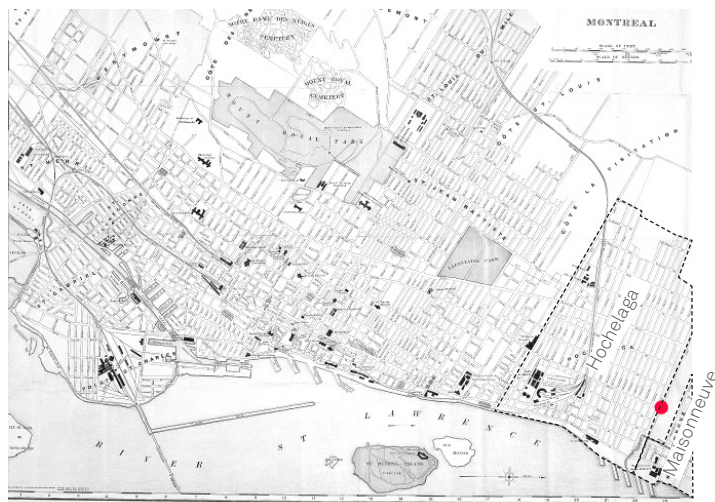


Figure 10 : Competition site shown on a map from 1910.. Source : McCord Museum, Montréal, Canada, 1910



Figure 11 : Map showing subdivided lots and the CN railroad line in 1907, around the development site. Source : Chas. E Good, Atlas of the City of Montreal and vicinity, 1907 (BAHQ)



Figure 12 : Map showing the built environment around the development site in 1949. Source : Ville de Montréal, Plans d'utilisation du sol de la ville de Montréal, 1949 (BAHQ)

## 3.2 PLACE SIMON-VALOIS AND PROMENADE LUC-LARIVÉE

### Place Simon-Valois

After years of unemployment and rationing during World War II, the area began to modernize. The 1960s saw important road construction and major changes to the urban fabric. These transformations, combined with the relocation of many factories, altered the neighbourhood's community life and economy. In the 1970s, the landscape of Hochelaga-Maisonneuve was once again transformed by the Olympic Games and the construction of the stadium.

Profoundly affected by deindustrialization, the historical village of Hochelaga, now part of Montréal's borough of Mercier-Hochelaga-Maisonneuve, remains a working-class neighbourhood where community life has deep roots. Today, many of the industrial buildings have been converted into large housing projects. Manufacturing has given way to a tertiary-sector economy that is helping to revitalize the area's commercial streets.

The decommissioning of the CN railroad right-of-way in 1997, the relocation of the company Lavo in 2000, and Montréal's acquisition of over 15,000 square metres of contiguous land created an opportunity to develop a large-scale urban revitalization project. In 2001, the city began an intense period of planning for the intersection of Rue Ontario and Avenue Valois by initiating a development program and embarking on public consultations. Subsequently, a consortium formed by the architectural firm in situ atelier d'architecture, Atelier BRAQ, and the landscape architect Nicole Valois was hired to come up with a comprehensive plan for the sector. The resulting plan, based on the site's intrinsic characteristics, proposed the development of Place Simon-Valois as a vector of revitalization.

In 2003, the consortium of Schème Consultants/Atelier Urban Soland was hired to build the public square. Named after Montréal businessman and philanthropist Simon Valois, the square was inaugurated in 2006.

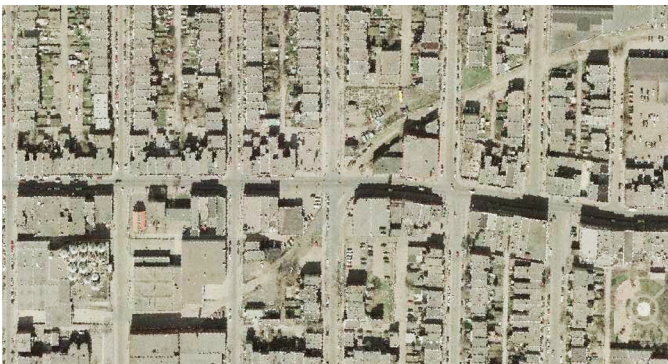


Figure 13 : Orthophotograph (2002) — Departure of the company Lavo



Figure 14 : Orthophotograph (2003) — Place Simon-Valois (construction site)



Figure 15 : Orthophotograph (2009) - Place Simon-Valois, inauguration and appearance of new real-estate construction

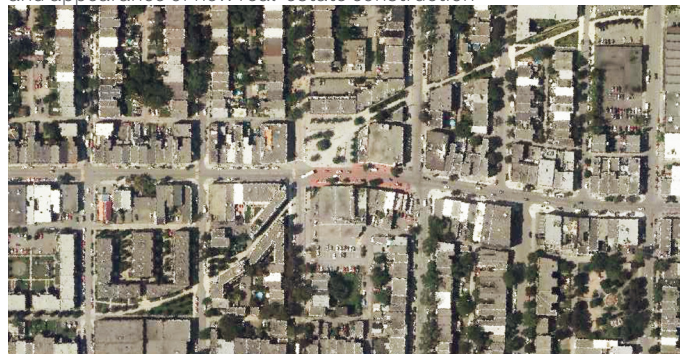


Figure 16 : Orthophotograph (2015) — Transitional infrastructures on rue Ontario

Its design was based on a sensitive examination of the area's history. The design consists primarily of:

- the introduction of a concept of sidewalks and terraces alongside private housing projects, with movable chairs during the summer months;
- an unbroken mineral surface whose pattern and color intensify depending on the typical use: darker in high-traffic areas and lighter in areas for leisure and social activities;
- a granite border separating the square from the sidewalks/terraces and the road;
- massive granite furniture symbolizing the former railway junctions;
- a three-pronged vegetation planting strategy: mature trees, flowering trees, and abundantly flowering shrubs;
- tailored decorative lighting around the square's perimeter;
- the use of Onyx cube lamps for ambient lighting.

The strength and coherence of the design concept have led to many millions of dollars in private investment. The square has become a powerful economic force, leading to real-estate development and a revitalization of the area. The square's success is based on the built environment that defines and brings it to life. In addition to being a catalyst for the Promenade Luc-Larivée project, Place Simon-Valois has become a convergence point for local citizens and can accommodate events attended by up to 1,500 people.

### Technical details

Development: 2004–2006

Project cost: \$2 million

Gross area: 1,800 square metres

Designers:

- Preliminary design: in situ atelier d'architecture, Atelier BRAQ, and Nicole Valois
- Place Simon-Valois development plan: consortium of Schème Consultants and Atelier Urban Soland



Figure 17 : Former CN rail lines on the current site of Place Simon-Valois. Source : Atelier d'histoire Mercier–Hochelaga-Maisonneuve (1975)



Figure 19 : View of Place Simon-Valois (2012) from Rue Ontario (similar viewpoint to figures 17 and 18).



Figure 18 : Site of Place Simon-Valois prior to construction (approximately 2004)



Figure 20 : Place Simon-Valois (2014) toward the intersection of Valois/Ontario.

## Promenade Luc-Larivée

Promenade Luc-Larivée is a linear park along the right-of-way of the former Canadian National railroad. It extends from Rue Joliette to Avenue Jeanne-d'Arc and was built from 2004 to 2009 for the section between Rue Joliette and Avenue d'Orléans, and from 2013 to 2014 for the sections east of Avenue d'Orléans. This green pathway connects a number of points of interest in the neighbourhood (Figure 21), making it a convenient route for many locals. For the borough of Mercier-Hochelaga-Maisonneuve, it has been an innovative project in terms of both its form and development process. It is instrumental in combatting heat islands, and it serves as an urban pathway that gives locals a space to relax and socialize and that encourages active transportation. In practical terms, it comprises 103 trees and 420 square metres of new shrubs, in addition to the development of 950 new housing units, including social housing. The linear park was named after Luc Larivée, a doctor who practiced in Hochelaga for over 40 years and who also served on city council.

## Technical details

Development: 2004–2009 and 2013–2014

Project cost: \$4.6 million

Gross area: 630 linear metres



Figure 21 : Promenade Luc-Larivée: location of linear park, photos of existing amenities and development phases.

### 3.3 TRANSITIONAL WORK DONE FOR PIRPP PROGRAM

Under the PIRPP, the project had two transitional development phases during the summers of 2015 and 2016. These seasonal amenities were installed to test various road-closure scenarios aimed at making the site more pedestrian friendly and enlivening the area by adding temporary furniture and markings. The city undertook a variety of evaluations in order to put figures on the project's impacts and gain an understanding of local stakeholders' receptiveness to the concept of shared streets.

In 2015, transitional structures consisted of terraces and street markings along Rue Ontario between Avenue Valois and Avenue Bourbonnière to indicate frequent pedestrian use during the summer months. The terraces enlivened the space, while the brick-red street markings unified the sidewalk and roadway with the building façades. Movable bollards facilitated the closure of this stretch of roadway for events.

In 2016, the transitional project consisted of adding furniture and street markings to the area defined by the future shared space. The amenities were designed by the multidisciplinary design workshop En temps et lieu. Custom-made structures, including a stage, were installed on platforms surrounding Place Simon-Valois. The sidewalk was painted with a turquoise, salmon, and white geometric pattern. The artist Roadsworth completed the concept with his work Sexapus, an octopus whose tentacles snaked between the lines of the pedestrian crossing on the south side of Rue Ontario.

During the preceding summers, numerous activities were organized by groups such as the Corporation d'animation des places publiques (CAPP) in partnership with the Société de développement commercial (SDC) Hochelaga-Maisonneuve (Section 4.4).



Figure 22 : Saint-Jean-Baptiste Day festivities (Source: Mélanie Dusseault, photographer 2014).



Figure 24 : Summer carnival organized by CAPP. Closure of Rue Ontario (source : Mélanie Dusseault photographer, 2016).



Figure 23 : View of transitional structures from 2015: Parklets, planters, and brick-red street painting (Source: Mélanie Dusseault, photographer)



Figure 25 : Activities on Place Simon-Valois and closure of Rue Ontario – Summer festival organized by CAPP (source : Mélanie Dusseault photographer, 2016).

### 3.4 URBAN LANDSCAPE

The Zone de rencontre Simon-Valois project is located at the eastern edge of Hochelaga, next to the Maisonneuve neighbourhood (Figure 26).

The built environment of Hochelaga-Maisonneuve boasts a rich industrial and working-class heritage. The area's most common construction types are industrial buildings and modest row houses built out of brick. The recent appearance of condominium projects has added a more modern architectural character and helped to transform the neighbourhood.

Despite the trees lining most of the streets and many parks and green spaces, such as the Luc-Larivière linear park, the borough has a very low percentage of canopy (12.7%).

### 3.5 URBAIN FABRIC

Promenades Ontario and Sainte-Catherine are mixed commercial arteries that cross and serve the Hochelaga-Maisonneuve from east to west. Local transverse streets are generally one-way. The urban fabric is characterized by long residential lots typical of Montréal, some of which still show signs of the area's industrial and railway-based heritage. For example, the angles of the facades and the irregularly shaped lots around Place Simon-Valois betray a past dominated by Canadian National rail lines.

The neighbourhood has four métro stations: Préfontaine, Joliette, Pie-IX, and Viau. A number of STM bus routes run along east-west arteries, in particular Rue Ontario (route 125), Sainte-Catherine (route 24), and Hochelaga (route 85).

Several bike paths also cross the area, in particular along Avenue Valois, along de Rouen, Lafontaine, Adam, de Chambly, and Bennett streets, and along a portion of Rue Davidson. There is also a bike path along Rue Notre-Dame.

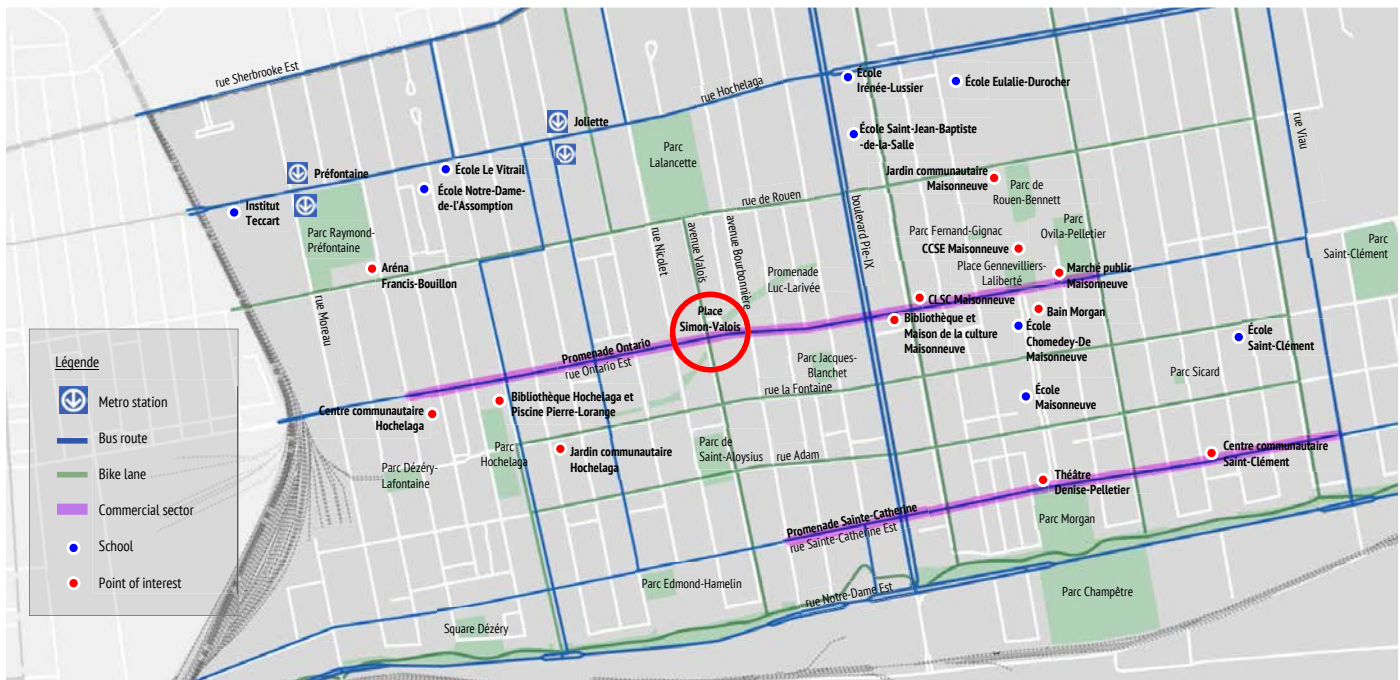


Figure 26 : Borough map, showing services, parks, and the road and bike path network. Commercial arteries (Promenade Ontario and Promenade Sainte-Catherine) are shown in purple.

## 3.6 BUSINESS DYNAMIC

### Promenade Ontario

Promenade Ontario, supported and stimulated by the local business development corporation (*Société de développement commerciale Hochelaga-Maisonneuve*), covers a portion of Rue Ontario. Emblematic of the borough of Mercier–Hochelaga-Maisonneuve, this commercial street extends along 1.35 kilometres between Rue Saint-Germain and Boulevard Pie-IX. The promenade offers locals a diverse array of businesses and services, such as professional services, offices, restaurants, retail shops, and personal care services. A high concentration of bars and restaurants contributes to the street's festive and lively atmosphere. Located at the heart of the promenade, Place Simon-Valois, hosts events and cultural activities that attract a large number of consumers from Mercier–Hochelaga-Maisonneuve and adjacent boroughs.

### Reconstruction work on Rue Ontario

Road reconstruction work has been done on Rue Ontario and will continue in the short- and long-term in the Hochelaga sector. In conjunction with the work to build the shared space outlined in this program, the sections of Rue Ontario on either side of the project will be rebuilt. In particular, this work will include widening the concrete sidewalks and the installation of granite borders, installation of projections at intersections, the replacement of lighting structures, and the construction of widened tree pits with gratings, inspired by the features on Rue Ontario Est in the Frontenac sector. These structures are aimed primarily at improving the safety and convenience of pedestrian movement along the commercial street.

### Repair of underground infrastructure

Repairs to underground infrastructure are planned in the near future in the competition perimeter. This work includes:

- reconstruction of the water pipe along Rue Ontario between Rue Nicolet and Avenue Valois,
- reconstruction of the water pipe along Avenue Valois between Rue Ontario and Rue La Fontaine,
- reconstruction of the water pipe at the intersection of Rue Ontario and Rue Nicolet.

To make this infrastructure work more cost-effective and minimize its impact, it will be done following the demolition work and prior to the surface work for the Zone de rencontre Simon-Valois project. The cost of this underground infrastructure reconstruction should not be included in the project's construction budget.

## 3.7 LOCALS AND USERS

The Zone de rencontre Simon-Valois will be part of a primarily residential area. The population of the Hochelaga riding (*Montréal en statistiques*, 2013, Statistics Canada Census) is approximately 33,500 people, which represents about 25% of the borough's population.

Young people 25 to 34 make up nearly one-quarter of the population. On the other hand, only 3,500 residents 65 years and older live in the district, the lowest concentration of this age group in the borough.

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The functional and technical requirements in this section outline the expectations for the proposed design.

# FUNCTIONAL AND TECHNICAL REQUIREMENTS

- 4.1 Geometry and configuration of development
- 4.2 Free and efficient movement
- 4.3 Events and attractions
- 4.4 Vegetation
- 4.5 Expansion of grocery store adjacent to site
- 4.6 Materials and street furniture
- 4.7 Lighting and safety
- 4.8 Universal accessibility





## 4.1 GEOMETRY AND CONFIGURATION OF DEVELOPMENT

### Existing street cross-section

Currently, Rue Ontario has conventional sidewalks, two lanes of traffic, and a parking lane on either side (Figure 27). Avenue Valois has conventional sidewalks with projections and bike lanes on either side of the single lane of traffic, which is one-way south (Figure 28).

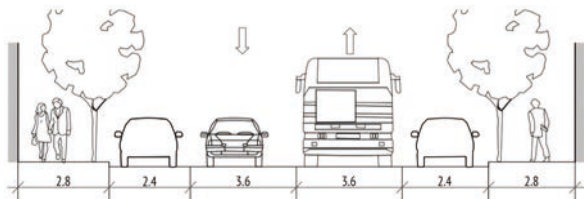


Figure 27 : Existing street cross-section – Rue Ontario

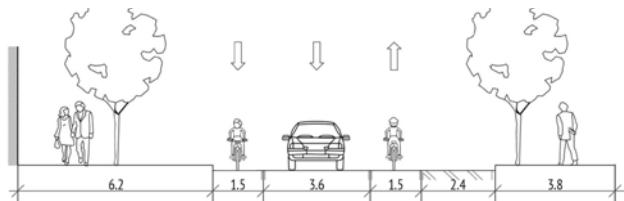


Figure 28 : Existing street cross-section – Avenue Valois

### Zone de rencontre

The proposed development plan must be in keeping with the functional and aesthetic qualities of the shared street concept. (Section 2.1).

The design must suggest different strategies for slowing traffic at the approach to and within the shared space. Changes to street configuration and geometry must not restrict the safe access of users to businesses and residences. No element must obstruct access to or reduce the functionality of nearby buildings. Protected and unobstructed rectilinear corridors alongside buildings must be incorporated for the purposes of snow removal operations and with a view to universal access. There must be an easily detectable visual and tactile delimitation between the shared street and the protected corridor. (Appendix 7.3).

### Entrance and exit thresholds

In addition to furnishing a visible area for signage announcing the beginning and end of the shared street, the entrance and exit thresholds should provide a smooth transition between the shared space and the traditional street (Appendix 7.3). A distinct visual treatment should indicate to drivers that a change in behaviour is expected. The approximate limits of these thresholds are shown in Figure 29 and should be no more than 10 metres before and after the shared space. Competitors may question the size of these zones, but they must justify their choices.

## 4.2 FREE AND EFFICIENT MOVEMENT

### Motor vehicles

The speed limit is 20 km/h within the shared space. The design must permit access to all types of vehicles used for various purposes, including automobiles, buses, service vehicles, public safety vehicles (fire department, police, ambulance), waste management and maintenance vehicles, and delivery vehicles. Motorists must yield to pedestrians and cyclists. The design must be consistent with the principles of harmonious co-existence among users and with the imposed speed limit.

### Busses

STM bus route 125 travels down Rue Ontario in both directions and has two stops within the shared space, one in each direction. The location of the bus stops is shown in Figure 29. Competitors may question the placement of the stops but must justify their choices.

STM busses can lower the bus floor to reduce the step height, allowing those with reduced mobility to more easily enter and exit the bus. Busses are also equipped with ramps that can be deployed from the front doors for people in wheelchairs. To ensure universal accessibility, bus stops must have a continuous border of 150 mm (6 inches) in height (see Appendix 7.3).

### Taxis

It is expected that the existing three-vehicle taxi stand (Figure 29) on Avenue Valois will be preserved; however, its current location may be moved in order to optimize the porosity of the amenities. If kept, these spaces must be clearly identified, limited, and controlled.

### Parking

No parking spaces will be preserved within the intervention zone.

### Bicycles

The bicycle speed limit within the shared space is 20 km/h. Shared streets do not generally have bike lanes; however, cyclists are allowed to ride in both directions on the road, in a spirit of harmonious co-existence. The BIXI bike rental station, shown in Figure 29, may remain in its current location or be moved in order to optimize the porosity of the amenities.

## 4.3 EVENTS AND ATTRACTIONS

The borough would like the shared space to be designed both to allow safe, everyday use and to increase the current capacity of Place Simon-Valois by way of closing off roads. The square has already been hosting events of various types and durations for the past several years. For guidance, the organization in charge of putting on public events (*Corporation d'animation des places publiques – CAPP*) has held the following activities:

- Fête nationale du Québec (June 2015)
- Nature en ville (July 2015)
- Carnaval estival (August 2015 and 2016);
- Jeux plein la rue (July 2016);
- Nature plein la rue (September 2016);
- Pianos publics (July to September 2016).

Rue Ontario was closed during 14 weekends and two full weeks during the summer of 2016. During local events, the public square accommodates on average 8,100 pedestrians per day.

The design concept for the shared space must lean toward transformations that increase the appeal of Place Simon-Valois both day and night and in all seasons.

### Outdoor stage

The site must be improved so that it can host large-scale events with high attendance. For outdoor shows, a stage is generally set up at the northeast corner of Place Simon-Valois (Figure 29). The placement of this stage and the site's configuration can be reconsidered in order to increase the site's capacity. For reference, the show for the Fête nationale du Québec in 2016 attracted approximately 10,000 spectators. Moving the stage will, however, make it necessary to install a second camlock control booth (Appendix 7.5).

### Road closure measures

In order to close the shared space to traffic during events, a high-quality, long-term solution must be installed at the entrances and exits of the Zone de rencontre. When closing Avenue Valois, vehicles will be detoured west along the alley north of Rue Ontario.

Various road-closure scenarios must be anticipated, such as:

- partial closure of Avenue Valois, between the alley and Rue Ontario,
- partial closure of Rue Ontario, between Avenue Valois and Avenue Bourbonnière,
- complete closure of the shared space to traffic.

## 4.4 VEGETATION

The site's existing trees must be preserved; however, they may be relocated in order to optimize the proposed design of the shared space. Greening work may take many forms but must be compatible with the site's commercial and entertainment functions. As much as possible, the selected species should require little maintenance and be highly tolerant to the weather conditions, the urban environment, and de-icing salt.

The tree species included in the proposal should offer enough cover to meet the boroughs recent greening objectives (*Plan d'action canopée 2012–2021*). Any trees planted must have a sufficient volume of soil, either by incorporating high-volume planting pits or through equivalent technologies. It is suggested to allow for 10 cubic metres of soil per tree.

The proposed vegetation arrangement must be innovative and incorporate best practices in terms of sustainability, minimization of heat islands, and optimization of planted areas.



Figure 29 : Existing plan of the development perimeter (shared space and entrance and exit thresholds)

- |                |  |  |  |
|----------------|--|--|--|
| ① BIXI station | ③ Triangular vacant lot  | ⑤ Bus stop                             |  Competition perimeter, including entrance and exit thresholds. |
| ② Taxi station |  ④ Planned expansion of Métro grocery store | ⑥ Current stage location during events |  |

## 4.5 EXPANSION OF GROCERY STORE ADJACENT TO SITE

The Métro grocery store opposite Place Simon-Valois is planning to expand to the edge of the sidewalk on Avenue Valois in the near future. The latest architectural proposals show a solid wall along the triangular vacant lot at the intersection of Rue Ontario and Avenue Valois (Figure 30). The timeframe of this expansion has not yet been fixed, however. The proposed work for the competition should take this into consideration and not bank solely on the presence of a built structure in this location.

The presence of this large-surface grocery implies a certain amount of truck traffic and loading/unloading operations in the vicinity of the competition perimeter.



Figure 30 : Existing grocery store and illustration of planned expansion. Source : Google



Figures 31 : Existing street furniture in Place Simon-Valois.



Figures 32 : Street furniture on Avenue Frontenac that will be used all along Promenade Ontario.



Figures 33 : Lighting structures on Avenue Frontenac that will be used all along Promenade Ontario.

## 4.6 MATERIALS AND STREET FURNITURE

The design should incorporate creative and high-quality proposals in terms of materials, in particular for street furniture and ground covering. Designers should focus on materials that match adjacent design elements, in particular by creating a coherent dialogue with:

- Place Simon-Valois (Figure 31):
  - light concrete paving blocks 300x300x100 mm,
  - dark concrete paving blocks 300x300x100 mm,
  - granite paving stones 300x300x100 mm,
  - granite borders 300 mm,
  - custom granite benches.
- amenities planned for Rue Ontario such as those built on Avenue Frontenac (Figure 32):
  - ridged concrete blocks,
  - granite border 300 mm,
  - lighting structures in the Frontenac area (Figure 33).

The concept should propose an arrangement for the space's equipment, including integrated and movable street furniture, road-closure structures (e.g., bollards), and tree planter boxes and pits. Equipment arrangement must take into account the site's specific uses, avoid overwhelming public spaces, not hinder traffic flow, and integrate the principles of universal accessibility (Appendix 7.3). Street furniture can be selected from the city's furniture directory, from supplier catalogues, or custom designed as necessary in order to propose an overall concept that falls within the project's construction budget. All custom designed furniture will become the exclusive property of the Ville de Montréal.

The concept must foster the use of recycled materials, present sustainable solutions in terms of both form and function, be energy efficient, and use materials with low environmental impact. The materials and street furniture's quality and maintenance requirements must take into consideration the significant traffic in the area. The solutions presented must also be in keeping with the borough's sustainable development plan (*Plan local de développement durable de l'arrondissement Mercier-Hochelaga-Maisonneuve*).

## 4.7 LIGHTING AND SAFETY

There are currently four different types of lighting structure within the development perimeter: both functional and decorative street lamps on Rue Ontario, decorative street lamps on Avenue Valois, and the distinctive street lamps used for Place Simon-Valois. (Figure 34A).



Figure 34A : (left to right): Functional and decorative street lamps on Rue Ontario, decorative street lamp on Avenue Valois, and the distinctive street lamp in Place Simon-Valois Source: Google

All of the lighting structures within the shared space perimeter must be replaced. The lighting structures in Place Simon-Valois must also be brought up to existing standards, which consists of replacing the existing bulbs with LED bulbs that have a colour temperature of 3000 K.

It has been decided that the Rue Ontario structures will be the same model as the Frontenac sector (Figure 33).

There are two options for the structures in the shared space:

- Option 1 : structures are selected from the city's lighting structure catalogue (see Appendix 4 of the city's lighting policy (*Politique d'éclairage*)).
- Option 2 : structures are selected from the catalogues of various North American manufacturers. Certain restrictions apply, such as any given model's availability from at least three manufacturers.

The lighting proposal and all of the lighting structures must be consistent and comply with the requirements of the *Politique d'éclairage*. All lamps in the city must now use LED bulbs with a colour temperature of 3000K.

The design may also include a mood-lighting strategy that enhances the site's vibrancy at night; however, it must be durable, easy to maintain, and not disturb local residents. The mood-lighting concept may employ a wider range of colour temperatures and/or colours. It may also take different forms: on the ground, in the air, continuous, point-source, integrated into structures, etc. The proposal may not include any use of private property (e.g., for anchoring).

### Solution for replacing Onyx cube lamps

The proposal must provide suggestions for replacing the Onyx cube lamps (lighting structures) in Place Simon-Valois with a more durable solution. However, the proposed changes must in no way move the square's electrical outlets or alter its underground electrical system.



Figures 35 : Left: Onyx cube lamp structure. Right: damaged Onyx cube lamp.

## 4.8 UNIVERSAL ACCESSIBILITY

Montréal's universal accessibility policy (*Politique d'accessibilité universelle*) applies to every aspect of the city's operations, including the development of spaces and services for citizens. The shared-street concept gives rise to complex design issues when it comes to maintaining universal accessibility to the premises. The loss of the usual points of reference makes navigation within the space more difficult for people with vision impairments. Hence, the principles and directives of Appendix 7.3 must be applied.

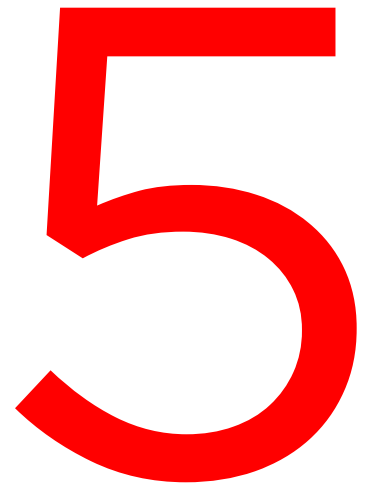
The development concept must draw upon best practices in universal accessibility, as employed both nationally and internationally, for use within the particular context of the shared street. The borough seeks to implement an exemplary project that will serve as a model for best practices and the city's knowhow in this area.

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The proposed development concept must integrate the restrictions outlined in the section below.

# RESTRICTIONS

- 5.1 Signage
- 5.2 Fire safety and emergency services
- 5.3 Components and ground anchors
- 5.4 Public utilities and drainage
- 5.5 Electricity
- 5.6 Maintenance and durability
- 5.7 Development standards
- 5.8 Regulations and policies



## 5.1 SIGNAGE

The road signage within the shared space is shown in Figure 36. The placement of each sign is indicated with coloured dots, as follows:

- Black dots indicate the start of the shared street.
- White dots indicate the end of the shared street.
- The red dot marks the placement of the road sign and the stop line.

The shared-street concept is not currently defined in the Highway Safety Code (HSC). However, the Québec road safety roundtable (*Table québécoise de la sécurité routière*) recommended that it be regulated in the next update of the HSC.

An experimental road sign was specially developed in 2012 for pilot projects on Rue Sainte-Claire and Rue Sault-au-Matelot in Quebec City, where the speed limit is 20 km/h and pedestrians and cyclists share the road with vehicles (Figure 37). The new sign, expected when the shared-street concept is added to the HSC, may be different and take its inspiration from signs in Belgium and France (Figure 38).

Once the Zone de rencontre Simon-Valois development concept has been defined, the borough will make a request to Québec's department of transportation (*ministère des Transports, de la Mobilité durable et de l'Électrification des transports*) to use the regulatory signage for shared spaces, which will be in effect when the project is implemented.

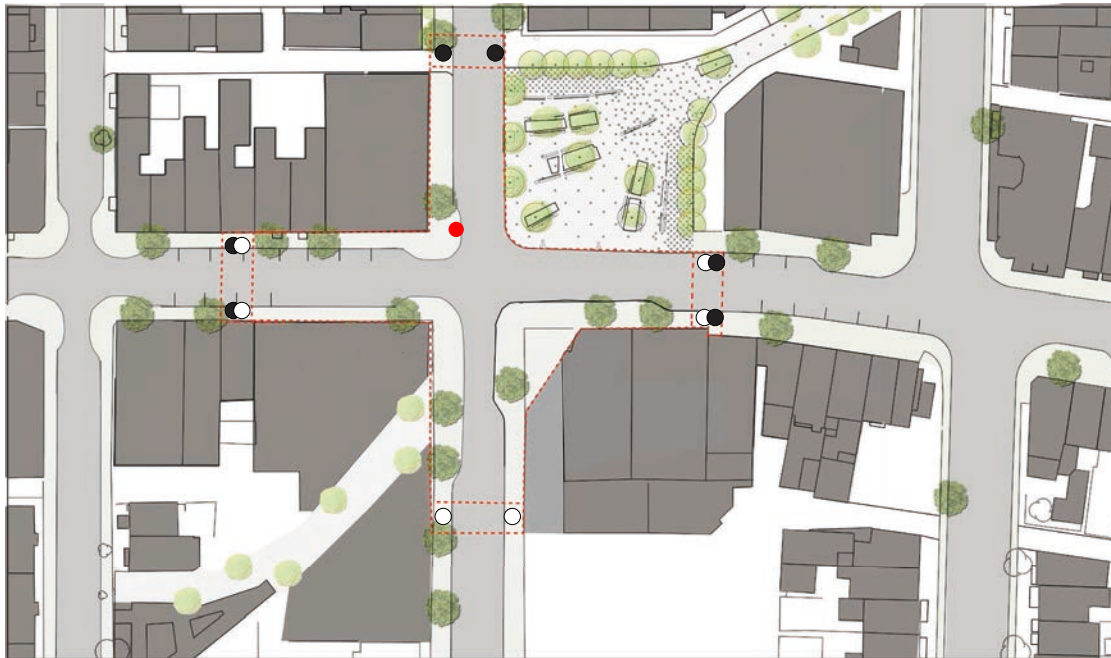


Figure 36 : Signage location

● Location of signs indicating the start of the shared street

○ Location of signs indicating the end of the shared street

● Location of signs and stop line



Figure 37 : Experimental road sign created in 2012 for testing in shared-street pilot projects in Quebec City



Figure 38 : Shared space road sign used in France

## 5.2 FIRE SAFETY AND EMERGENCY SERVICES

The site must be accessible to emergency service vehicles (fire, police, ambulance) at all times. An obstacle-free vehicle lane at least 3.5 metres wide, with 6 metres of clearance and 5.5 metres high, must be preserved.

## 5.3 COMPONENTS AND GROUND ANCHORS

All proposed equipment must include reasonable ground anchoring solutions. Any hung or hooked components must be designed factoring in any load variation caused by the weather. It is possible that soils are contaminated. In such cases, a geotechnical study and characterization studies will be carried out.

## 5.4 PUBLIC UTILITIES AND DRAINAGE

A map of the site indicating existing public utility infrastructure (sewer, water, electricity) is included in the appendices. Underground infrastructure work is planned for Rue Ontario and Avenue Valois after the demolition phase and prior to the construction of the shared-space project. This work is outlined in Section 3.6. The costs of all other infrastructure changes necessitated by the proposed concept must be included in the construction budget.

## 5.5 ELECTRICITY

The proposal must include an electrical system that can suitably and safely support the operation of all equipment for its expected uses. Any such electrical system and/or equipment must comply with applicable standards. Details of the existing lighting structures in Place Simon-Valois are included in the appendices.

## 5.6 MAINTENANCE AND DURABILITY

The shared space's design must allow all components to be maintained in a straightforward and ongoing fashion. The usual requirements regarding durability, resistance to weather and vandalism, and ease of maintenance also apply. Without limiting creativity, the development must lean toward equipment and systems that fit with the city's current operations and maintenance practices. Particular attention should be paid to resistance to winter weather conditions. Components must not hinder normal snow removal operations from roadways or walkways.



## 5.7 DEVELOPMENT STANDARDS

The following minimal standards that determine the roadway's geometry must absolutely be respected.

- minimum traffic lane: 3.5 metres
- minimum width of protected, obstacle-free corridors: 1.8 metres;
- minimum clearance width required for the operation of fire emergency vehicles: 6 metres. This space must be solid enough to support the vehicles' weight. It does not absolutely require a mineral surface, but it must be accessible at all times, free from blockages, and able to be cleared of snow in winter.

## 5.8 REGULATIONS AND POLICIES

The development must comply with all regulations in effect, and with all federal, provincial and municipal codes, laws, and regulations, including but not limited to:

- The Québec Highway Safety Code
- Quebec Construction Code, ch. 1 – Building, and the National Building Code of Canada 2005 (amended)
- National Fire Code of Canada 2005 (NFCC), its amendments and related documents
- Borough city planning regulations (*Règlement d'urbanisme*)
- Montréal's Transportation Plan (and its *Pedestrian Charter*)
- Borough's local transport plan (*Plan local de déplacement*)
- Borough's sustainable development plan (*Plan local de développement durable*)
- Guide to principles of sustainable development (*Guide pour la prise en compte des principes de développement durable*) from the ministère du Développement durable, de l'Environnement et des Parcs;
- Montréal's universal accessibility policy (*Politique municipale d'accessibilité universelle*)
- *Montréal Community Sustainable Development Plan 2010–2015*
- Montréal's canopy action plan (*Plan d'action Canopée 2012-2021*)
- Société Logique and INLB (2013): *Critères d'accessibilité universelle: Déficience visuelle- Aménagements extérieurs*

# IMPLEMENTATION OBJECTIVES

- 6.1 Constructions budget
- 6.2 Work completion schedule



## 6.1 CONSTRUCTION BUDGET

The total budget allocated for demolition work and surface construction of the Zone de rencontre Simon-Valois is **\$3,200,000** (plus taxes), including contingencies.

The construction budget estimate must include costs related to any relocation of underground infrastructure required for the development concept. However, the following infrastructure work is already planned and should be excluded from the construction budget:

- excavation and reconstruction of the water pipe on Rue Ontario between Rue Nicolet and Avenue Valois,
- excavation and reconstruction of the water pipe on Avenue Valois between Rue Ontario and Rue La Fontaine,
- excavation and reconstruction of the water pipe at the intersection of Rue Ontario and Rue Nicolet.

For details about what this work entails, see Section 1.4 of the competition regulation document. No additional funds can be allocated to the project.

## 6.2 WORK COMPLETION SCHEDULE

Work for the project will take place over a period of about one year, starting from the date the competition winner is selected. As a guide, the anticipated project schedule is as follows:

- Selection of winner: February 2018
- Finalisation of concept and production of plans and estimates: February to April 2018
- Call for tenders from contractors: April and May 2018
- Infrastructure work: 45 days
- Project work: June to November 2018
- Inauguration: November 2018

APPENDICES

7

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#### **A7.1 SITE**

- Map file (dwg) of competition perimeter
- As-built data (dwg) for Place Simon-Valois
- 3D model (sketch up)
- Photographs of sector
- Orthophotographs of sector
- Plan of public utilities and infrastructureS

#### **A7.2 PEDESTRIANIZATION PROGRAM AND PARTICIPATORY PROCESS**

- *Cadre de référence — Programme des rues piétonnes et partagées — Édition 2017*, Direction des Transports de la Ville de Montréal
- Promotional pamphlet for transitional structures in the summer of 2015
- Events produced by the CAPP in Place Simon-Valois

#### **A7.3 BROAD GUIDELINES FOR UNIVERSAL ACCESSIBILITY IN A SHARED-STREET SETTING**

- Identification of universal accessibility parameters for shared streets on Rue Saint-Paul – Broad development principles derived from collaborative research
- Principles of universal accessibility in the public sphere

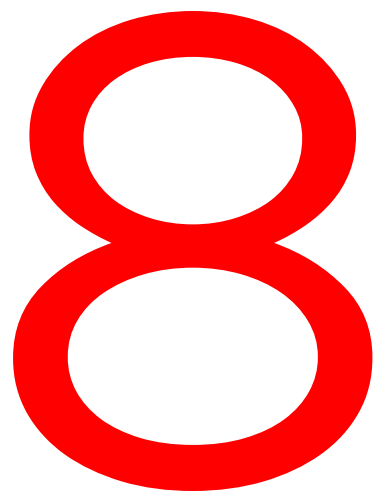
#### **A7.4 VILLE DE MONTRÉAL STREET FURNITURE CATALOGUES**

- Montréal lighting policy (*Politique d'éclairage*)
- Catalogue of benches and other furniture

#### **A7.5 OTHER**

- *Sharing the street in urban areas: the example of the "code de la rue" (street use code) in France* - Catherine Berthod and Benoît Hiron
- Metro grocery store expansion plan (preliminary proposal)
- Details concerning the existing lighting structures in Place Simon-Valois
- Details concerning the camlock control booth
- STM – Preferred sidewalk structure to facilitate people with reduced mobility entering and exiting busses.

REFERENCES



## LIST OF REFERENCE MONOGRAPHS, STUDIES, AND WEBSITES (non-comprehensive)

---

### MONOGRAPHS

BENOÎT, Michel et GRATTON, Roger. 1991. *Pignon sur rue : Les quartiers de Montréal*. Éditions Guérin, Montréal, 393 pages.

GOURNAY, Isabelle (dir.). 1998. *Montréal, métropole 1880-1930*. Éditions CCA : Boréal cop, Montréal, 223 pages

LORTIE, André (dir.). 2004. *Les années soixante, Montréal voit grand*, CCA, Montréal, 205 pages

NOPPEN, Luc. *Du chemin du Roy à la rue Notre-Dame*. 2001. Éditions les publications du Québec, Montréal, 176 pages

ROBERT, Jean-Claude. *Atlas historique de Montréal*. 1994. Éditions Libre Expression, Montréal 167 pages

### REPORTS AND STUDIES

Société Logique et INBL (2013) : Critères d'accessibilité universelle : Déficience visuelle - Aménagements extérieurs [link] : <http://www.societelogique.org/content?page=actualites&nID=120>

Imaginer, réaliser la ville du 21<sup>e</sup> siècle – Cahiers des bonnes pratiques en design n° 3 [link] : [https://designmontreal.com/sites/designmontreal.com/files/cahier\\_bonnes\\_pratiques\\_03.pdf](https://designmontreal.com/sites/designmontreal.com/files/cahier_bonnes_pratiques_03.pdf)

VILLE DE MONTRÉAL, SMVTP (2005). Évaluation du patrimoine urbain : arrondissement Mercier–Hochelaga-Maisonneuve. Montréal, 58 pages  
[link] : [http://ville.montreal.qc.ca/portal/page?\\_pageid=2240\\_2893649&\\_dad=portal&\\_schema=PORTAL](http://ville.montreal.qc.ca/portal/page?_pageid=2240_2893649&_dad=portal&_schema=PORTAL)

*Troisième rapport de recommandations - Pour des routes de plus en plus sécuritaires*. Octobre 2013  
[link] : <https://securite-routiere.qc.ca/doc/rapport-tsr.pdf>

### WEBSITES

Table québécoise de la sécurité routière [link] :  
<https://securite-routiere.qc.ca/publications.html>

Ville de Montréal, arrondissement Mercier–Hochelaga-Maisonneuve, histoire d'Hochelaga-Maisonneuve [link] : [http://ville.montreal.qc.ca/portal/page?\\_pageid=9417\\_114567603&\\_dad=portal&\\_schema=PORTAL](http://ville.montreal.qc.ca/portal/page?_pageid=9417_114567603&_dad=portal&_schema=PORTAL)

Société de développement commerciale d'Hochelaga-Maisonneuve  
link: <https://hochelaga.ca/a-propos/>

Atelier d'histoire Mercier–Hochelaga-Maisonneuve [link] : <https://ahmhm.wordpress.com/>

Société d'histoire de Montréal [link] :  
[http://ville.montreal.qc.ca/portal/page?\\_pageid=8757\\_97305573&\\_dad=portal&\\_schema=PORTAL](http://ville.montreal.qc.ca/portal/page?_pageid=8757_97305573&_dad=portal&_schema=PORTAL)

Ville de Montréal, Grand répertoire du patrimoine bâti de Montréal  
[link] : <http://patrimoine.ville.montreal.qc.ca/inventaire/index.php>

Montréal en quartier [link] :  
<http://www.memorablemontreal.com/accessibleQA/histoire.php?quartier=7>