PROGRAM

Place des Montréalaises

International multidisciplinary landscape architecture competition

Service de la mise en valeur du territoire – Direction de l'urbanisme
with the support of the Service des grands parcs, du verdissement et du Mont-Royal, the Service des infrastructures, de la voirie et des transports and the borough of Ville-Marie

Ville de Montréal

June 28, 2017

Montréal


MONTRÉAL
VILLE UNESCO
DE DESIGN

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TABLE OF APPENDICES (ALL IN FRENCH ONLY)

The 2D and 3D plans in appendices D and E are for illustrative purposes only, to assist in the development of the proposal and presentation.

AVAILABLE ONLINE

- Website for the Champ-de-Mars Sector Project: http://www.makingmtl.ca/secteurchampdemars
- Future public space around the métro station – miscellaneous documentation: http://www.makingmtl.ca/publicspacechampdemars
- Redevelopment of Place Vauquelin within the Cité administrative – miscellaneous documentation: http://makingmtl.ca/placevauquelin/
- Redevelopment of Square Viger – miscellaneous documentation: http://makingmtl.ca/squareviger

OTHER REFERENCES

- Montréal Heritage Site: www.vieux.montreal.qc.ca
- Sustainable Montréal 2016–2020 Plan: http://ville.montreal.qc.ca/portal/page?_pageid=7137,78111572&_dad=portal&_schema=PORTAL
- Montréal Smart and Digital City 2015–2017 Action Plan: http://villeintelligente.montreal.ca/en/action-plan-2015-2017
- Climate Change Adaptation Plan for the Montréal Agglomeration 2015-2020: http://ville.montreal.qc.ca/pls/portal/docs/PAGE/ENVIRO_FR/MEDIA/DOCUMENTS/2017_PACCAM_2015-2020_MEASURES.PDF
- Plan de protection et de mise en valeur du Vieux-Montréal (in French): http://ville.montreal.qc.ca/pls/portal/docs/PAGE/PATRIMOINE_URBAIN_FR/MEDIA/DOCUMENTS/VILLE%20MTL_PLAN%20DE%20PROTECTION_FR_21%20D%C9C%2012.PDF
- Montréal Bicycle Path Network (in French): http://ville.montreal.qc.ca/portal/page?_pageid=8957,99637650&_dad=portal&_schema=PORTAL
- Municipal Policy on Universal Accessibility (in French) http://ville.montreal.qc.ca/portal/page?_pageid=8258,90439645&_dad=portal&_schema=portal
- Société de transport de Montréal – Champ-de-Mars métro station: http://www.stm.info/en/info/networks/metro/champ-de-mars

NOTE TO THE READER

This program summarizes the observations and information analyses available at the time of writing. The content and images presented are illustrative, to help you better understand the issues raised by this project. In case of disparity between the information provided in appendices and this program, the program takes precedence.

The orientation of the maps and the names of the cardinal points in this document are in keeping with Montréal usage, which holds that Rue Sanguinet and Avenue de l'Hôtel-de-Ville point north, rather than in keeping with geographical reality.

DEFINITIONS

Avenue de l'Hôtel-de-Ville bridge: Vehicle bridge that stretches above the Ville-Marie Expressway and also includes part of the U-turn access ramp from Rue Sainte-Antoine Est to the westbound Ville-Marie Expressway.

BIXI: The Ville de Montréal's bike-share system.

Borough of Ville-Marie: One of the 19 boroughs that make up the Ville de Montréal. It occupies the central part of the city, between Mount Royal and the St. Lawrence River, and also includes Île Sainte-Hélène and Île Notre-Dame on the St. Lawrence River.

Champ-de-Mars: Major civic space in the Ville de Montréal, which in the past was a site for military manoeuvres. Located north of City Hall, it features a large grassy space and the exposed vestiges of Montréal's fortifications dating to the 18th century.

Champ-de-Mars Sector Project: Area to be redeveloped, bordered by Rue De Bleury (west), Rue Notre-Dame (south), Rue Amherst (east) and Boulevard René-Lévesque (north). The spatial planning projects slated for this area include, among others, the four blocks of Square Viger, the areas bordering Champ-de-Mars métro station and the Cité administrative, including the redesign of Place Vauquelin, near City Hall.

CHUM: Centre hospitalier de l'Université de Montréal (Université de Montréal Hospital), which was recently relocated to Rue Saint-Denis between Boulevard René-Lévesque and Avenue Viger.

Cité administrative: Group that includes a number of major public institutions, including City Hall, the old and new courthouses, and the municipal court and Ernest-Cormier building (appeals court). The group also includes a number of significant public spaces, such as Place Marguerite-Bourgeoys, Place De La Dauversière, Place Vauquelin, the Allée des Huissiers, and Champ-de-Mars.

City: The Ville de Montréal.

City pedestrian tunnel: Underground pedestrian passageway that crosses the Sanguinet and Saint-Antoine ramps as well as Rue Saint-Antoine starting from the walkway outside the Champ-de-Mars métro station.

City pedestrian tunnel access structure: Four access structures leading to the Ville de Montréal pedestrian tunnel, located at the end of the existing pedestrian overpass (north); at the corner of Rue Saint-Antoine and Rue Gosford (south); between the two expressway ramps (east); and along Rue Saint-Antoine near Avenue de l'Hôtel-de-Ville (west).

Covering slab: New concrete slab designed and built by the MTMDET, which will cover the Ville-Marie Expressway between Avenue de l'Hôtel-de-Ville and Rue Sanguinet, a bequest of the Government of Québec to the Ville de Montréal for the city's 375th anniversary.

CRCHUM: Centre de recherche du centre hospitalier de l'Université de Montréal (CHUM) (Université de Montréal Hospital Research Centre). Built above the Ville-Marie Expressway, it occupies the quadrant formed by the Sanguinet ramp (west), Rue Saint-Denis (east), Rue Saint-Antoine (south), and Avenue Viger (north).

CRCHUM pedestrian tunnel: Underground pedestrian passageway that links the Champ-de-Mars métro station with the CRCHUM's Viger tower.

Glassworks by Marcelle Ferron: Inaugurated in 1968, this non-figurative work by artist Marcelle Ferron is integrated into the design of Champ-de-Mars métro station. Marcelle Ferron was a member of the Automatistes group and signed the *Refus global* manifesto.

MCC: Ministère de la Culture et des communications (Québec's ministry of culture and communications).

MTMDET: Ministère des Transports, de la Mobilité durable et de l'Électrification des transports (Québec's ministry of transport, sustainable mobility and transportation electrification).

MTMDET mechanical works and exit structure: New mechanical works and exit structure built at the north end of the covering slab, which includes, among others, an electrical room and an emergency exit for the Ville-Marie Expressway.

New public place: New public space that will be built in part on the covering slab, above both the expressway and the Montréal métro tunnel and around their periphery. This space is circumscribed by the quadrant bordered by Avenue Viger, the CRCHUM, Rue Saint-Antoine and Avenue de l'Hôtel-de-Ville.

Old Montréal: Declared a heritage site by the Government of Québec, this area is located within the borders of the borough of Ville-Marie.

Pedestrian overpass (existing): Pedestrian overpass that stretches above the Ville-Marie Expressway, linking the walkway outside Champ-de-Mars métro station to the City pedestrian tunnel. This overpass was demolished by the MTMDET as part of the expressway covering work.

Pedestrian overpass (new): New pedestrian overpass, an object of this competition, which will create a pedestrian link making it possible to cross the Saint-Antoine ramp and Rue Saint-Antoine between Champ-de-Mars métro station and Champ-de-Mars.

Place Marie-Josèphe-Angélique: Place located at the intersection of Avenue Viger Est and Avenue de l'Hôtel-de-Ville, in the area surrounding Champ-de-Mars métro station. The name aims to recall the existence of slavery in Montréal's history.

Place Vauquelin: Located between City Hall and the Lucien-Saulnier building (former courthouse), this public space includes an interactive fountain basin and a monument in memory of Jean Vauquelin. This place was redesigned as part of Montréal's 375th anniversary.

Project: Construction of a new public place with a pedestrian overpass in the area surrounding Champ-de-Mars métro station. It is the object of this competition. The project is located within the limits of the larger Champ-de-Mars Sector Project.

Quartier international de Montréal (QIM): Major urban design project located between the business core and Old Montréal and extending from Boulevard Robert-Bourassa (west) to Rue Saint-Urbain (east). Inaugurated in 2004, the project aims to further the development of Montréal's international vocation and includes two major public spaces, Square Victoria and Place Jean-Paul-Riopelle.

Saint-Antoine (or Berri) ramp: Exit ramp from the eastbound Ville-Marie Expressway that meets Rue Saint-Antoine. This ramp is also called the Berri ramp.

Sanguinet bridge: Vehicle bridge that spans the Ville-Marie Expressway and connects the expressway's Sanguinet/Saint-Laurent exit ramp with Avenue Viger to the north. This bridge will be kept as part of the expressway covering project.

Sanguinet (or Saint-Laurent) ramp: Exit ramp from the eastbound Ville-Marie Expressway, which passes above the expressway along the axis of Rue Sanguinet and meets Avenue Viger to the north. This ramp is also called the Saint-Laurent ramp.

SIM: Service de sécurité incendie de Montréal (Montréal's fire safety service).

Site: Perimeter defined by Avenue Viger (north), Rue Saint-Antoine (south), the CRCHUM (east) and Avenue de l'Hôtel-de-Ville (west).

Square Viger: Public space created in the 19th century and redesigned on a slab after the construction of the Ville-Marie Expressway. It is now split into four distinct blocks. The two westernmost blocks (I and II) are being redeveloped as part of Montréal's 375th anniversary.

STM: Société de transport de Montréal, a corporation that operates public transit in Montréal, meaning the métro and bus services.

STM access structure: Building above the Champ-de-Mars métro station. The station includes one of the métro system's biggest works of art, the glassworks by Marcelle Ferron.

STM métro tunnel: Tunnel in which the Montréal métro circulates, including a wider section at the platform level, and which crosses the site from west to east.

***Ville-Marie Expressway*:** Urban expressway (no. 720) through Montréal's downtown. It begins to the west at the Turcot interchange where highway 15 and highway 20 meet, and ends at the Jacques-Cartier Bridge, where it becomes Rue Notre-Dame. Its path through downtown is partly entrenched and underground.

1. PROJECT MISSION, APPROACH AND IMPLEMENTATION

1.1 PROJECT MISSION

The Ville de Montréal has determined that a priority urban project would be the repurposing of the areas bordering the Ville-Marie Expressway, grouping together a number of works under the term Champ-de-Mars Sector Project. This project aims to define an attractive, high-quality urban frame that repairs the cut made to the area by the construction of the Ville-Marie Expressway trench in the 1970s.

The vision for the Champ-de-Mars area as a whole is that of a crossroads between the old city and the one that has developed outside its walls. Begun with the Quartier international de Montréal (QIM), which recreated a high-quality link between Old Montréal and the business core, the construction of this crossroads to the east aims to restore ties between the historic city and its former *faubourgs* (neighbourhoods) and to enhance the high-quality network of public spaces from Square Victoria to Square Viger.

This vision results, among other things, from a participatory codesign process launched in 2014, and rests on numerous studies of the Champ-de-Mars area carried out by the City. It is articulated around five major spatial planning principles resulting from the diagnosis of the area:

- user appropriation of the area;
- quality urban design;
- friendly, welcoming mobility connections;
- enhancement of rich, diversified heritage;
- enhancement of the monumental cityscape.

To address the City's desire to repurpose the Champ-de-Mars area, the MTMDET is currently covering part of the Ville-Marie Expressway to enable the construction of Place des Montréalaises, a new public place adjacent to the Champ-de-Mars métro station. This work is a bequest of the Government of Québec to mark Montréal's 375th anniversary.

With a view to sourcing the most innovative and creative design ideas, the City is launching a international multidisciplinary landscape architecture competition for the permanent construction of this new public place, including a pedestrian overpass that reaches Champ-de-Mars. Through this meeting of ideas, the competition aims to produce innovative, high-quality solutions. Its objective is to choose and assign a multidisciplinary team that will be awarded a professional services contract for the project's implementation, including the detailed design, the development of plans and specifications, and the monitoring and surveillance of construction work.

The competition includes two major stages. Stage 1 of the competition consists of developing a preliminary design concept that will help determine the finalists for Stage 2 of the project. In Stage 2, each finalist will refine their concept and demonstrate the project's technical and financial feasibility. The contest rules set out the criteria to be complied with during the competition's two stages.

1.2 PROJECT APPROACH AND MAIN OBJECTIVES

This competition concerns the design of an identity-building public place with a pedestrian overpass adjacent to the Champ-de-Mars métro station, a major entry point to Old Montréal, at the foot of City Hall and the CHUM-CRCHUM (Université de Montréal Hospital and Université de Montréal Hospital Research Centre). This major project mobilizes a number of players, including the Ville de Montréal, the MTMDET (the Ministère des Transports, de la Mobilité durable et de l'Électrification des transports, the Québec government's ministry of transport,

sustainable mobility and transportation electrification) and the STM (the Société de transport de Montréal, Montréal's public transit authority), as well as major neighbouring institutions, local residents and workers, tourists, and Montrealers interested in the future of the area.

In 2009, the City took interest in the subject by organizing an ideas competition, Shukô Montréal, which was open to professionals and students and aimed to provide food for thought about the area's future. Over the last few years, the City has carried out several studies of the territory covered by the Champ-de-Mars Sector Project. We called upon various professional experts from the fields of design, transportation and heritage, and in 2014launched a participatory process for the area as a whole. We settled on co-design as a citizen participation approach for the Champ-de-Mars Sector Project. We chose this in order to include discussion opportunities and creation workshops that would emphasize citizen contributions throughout the project. The results of that process are available on the Champ-de-Mars Sector Project website.

The new public space must be built on top of the MTMDET's covering slab, the Montréal métro tunnel and their bordering areas. The Sanguinet exit ramp will be closed, while the Saint-Antoine ramp will be kept and widened to two lanes. This ramp will be partially covered; feasibility studies are underway. To improve transportation accessibility and user-friendliness, a new aerial pedestrian overpass must be added above Rue Saint-Antoine. This will replace the current pedestrian tunnel running underneath Rue Saint-Antoine and its namesake ramp. The addition of this component will compensate for the fact that the Saint-Antoine ramp, an impassable barrier, is being retained.

The Ville de Montréal wishes to integrate this significant new public space into a coherent network of public spaces along the edges of the Ville-Marie Expressway. It must clearly complement the public spaces of the Quartier international de Montréal (QIM), Old Montréal and the Quartier Latin, and must also be coherent with the design concept of the public space adjacent to the group of CHUM-CRCHUM buildings.

The Champ-de-Mars métro station, located at the heart of the new public space, acts as an entryway into Old Montréal. With that in mind, the aim of the planned new design is to enhance the pedestrian path between the Cité administrative and the rest of the Champ-de-Mars area. The new public place will provide an opportunity to pursue the commemoration of Marie-Josèphe-Angélique and to showcase the Champ-de-Mars métro station, which features a major glassworks by Marcelle Ferron, one of the first non-figurative artworks installed in the métro system. The design will also aim to provide clear sightlines for the attractive views toward Old Montréal and the downtown core, as well as the monumental cityscape and the area's characteristic features, and must clearly orient users in the space.

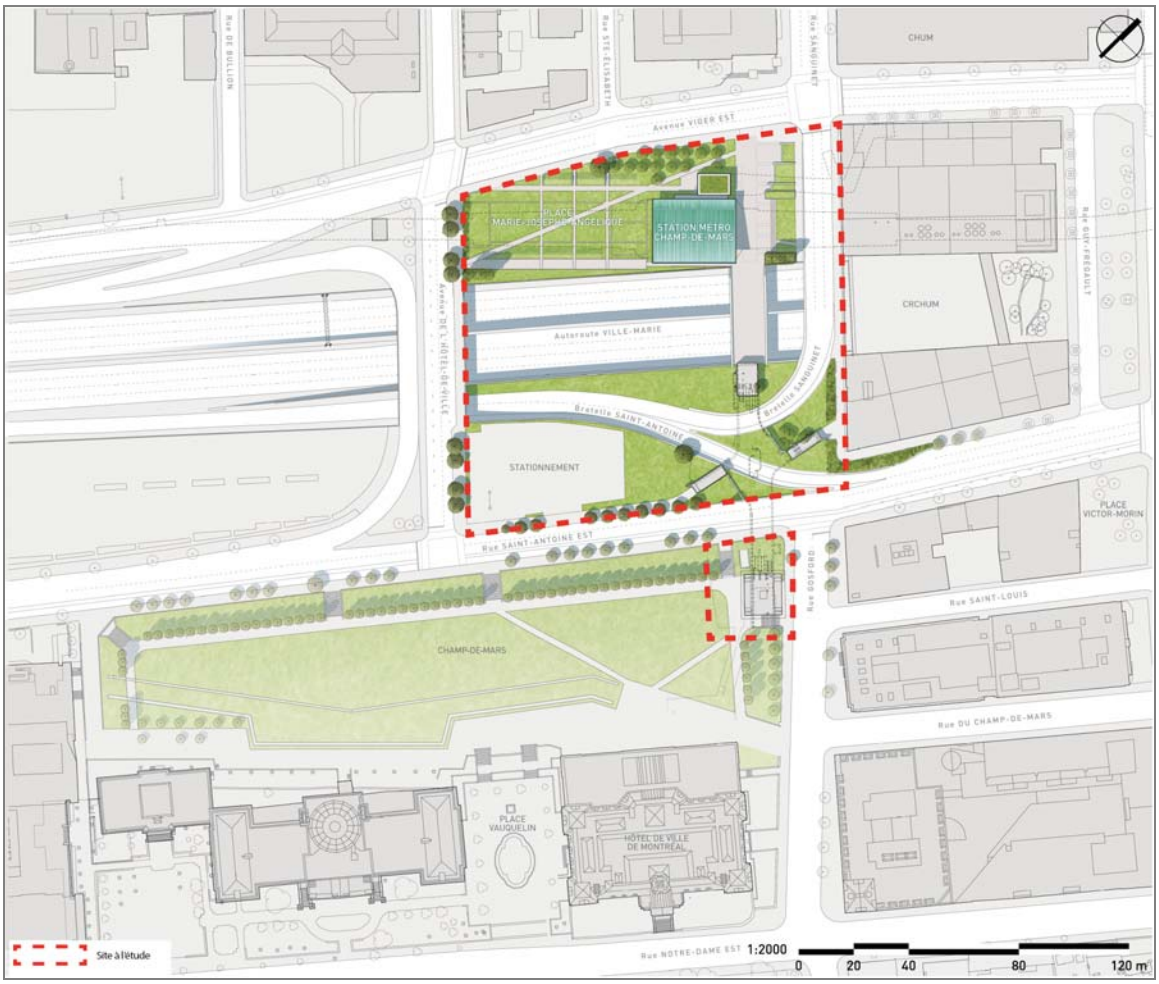
1.3 IMPLEMENTATION

The implementation strategy for the planned public place adjacent to the Champ-de-Mars métro station includes two distinct development phases from start to finish of the work. The first phase, which is not included in the present competition, is the MTMDET's covering of a part of the Ville-Marie Expressway and changes to the two expressway exit ramps. The second phase, which is the focus of this competition, aims to design the block bordered by Avenue Viger, Avenue de l'Hôtel-de-Ville, Rue Saint-Antoine and the CRCHUM, and to construct a pedestrian overpass linking the public space with Champ-de-Mars. These works will be carried out by the City and may begin following the MTMDET's expressway covering project. In parallel, the City is currently studying the feasibility of covering the Saint-Antoine (Berri) exit ramp. These covering works could be carried out at the same time as the construction work for the public place.

2. WORK PERIMETER

2.1 SITE IN ITS CURRENT FORM

Located in the borough of Ville-Marie, the site of the new public place occupies an area of slightly more than 1.7 hectares (about 140 m x 125 m). It is circumscribed by four of the area's streets with high vehicle traffic, including the Sanguinet ramp. Photographs of the site are provided in the Appendix A document and are also available in Appendix G.



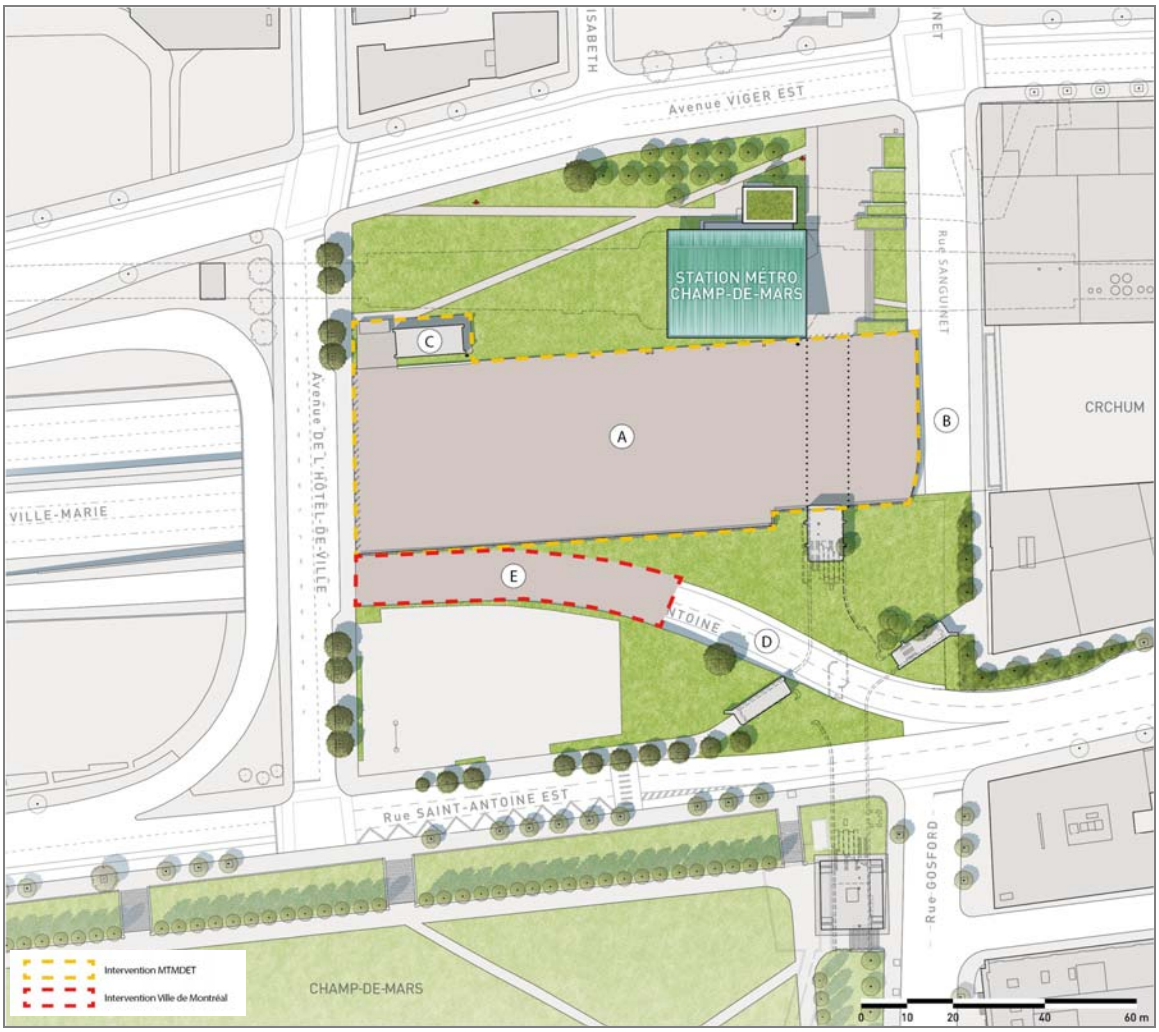
Schematic map of the current site and the work perimeter

- The **central** section is occupied by the entrenched expressway, which will be covered by the MTMDET.
- The site's **northern** section features grassy areas and a mineralized surface near the eastern façade of the métro station. The station's western space was named place Marie-Josèphe-Angélique in 2012. This section is located above the métro tunnel.
- The **southern** section, delimited by the Saint-Antoine ramp, is currently used in part as private parking. The City will acquire these parking lots and integrate them into the new public space. The section south of Rue Saint-Antoine, on Champ-de-Mars, is currently in use for a pedestrian tunnel access structure. This area will serve as the landing spot for the new overpass.
- To the **east**, at the base of the former Sanguinet ramp, the site extends along the "rear" façade of the CRCHUM and its delivery area (whose entrance is located on Rue Saint-Antoine). This façade is partly blind.
- To the **west**, off the site and past Avenue de l'Hôtel-de-Ville, the entrenched Ville-Marie Expressway and surface parking lots dominate the space, particularly due to the presence of a U-turn access ramp to the westbound expressway from Rue Saint-Antoine.

2.2 MTMDET PROJECT TO COVER THE VILLE-MARIE EXPRESSWAY

In essence, the expressway covering project (the first part, for which work will be completed in November 2017) consists of constructing a bridge on piles–type slab above the portion of the Ville-Marie Expressway located between Avenue de l'Hôtel-de-Ville and the Sanguinet bridge. This covering will cover an area of about 4,760 m² (A – yellow dotted line). The project also includes demolishing the existing pedestrian overpass leading to the City pedestrian tunnel, permanently closing the Sanguinet ramp (B), and constructing a mechanical works and exit structure to the north-west of the future slab (C). The project further includes widening the Saint-Antoine ramp to two traffic lanes (D).

The second part of the covering project is currently under study, and consists of partially covering the Saint-Antoine ramp (E – red dotted line); the work for this will be completed in 2021. This partial covering will involve changing the slope of the Saint-Antoine exit ramp and demolishing the City pedestrian tunnel as a result, along with three of the tunnel exit access structures located on either side of the ramp. The southern access structure for the pedestrian tunnel, located on Champ-de-Mars, will be demolished in parallel with the project work in a later phase.



Schematic drawing of the portion of Ville-Marie Expressway that will be covered by the MTMDET and of the partial covering of the Saint-Antoine ramp

3. WORK CONTEXT

3.1 CHAMP-DE-MARS SECTOR

The competition for the new public space fits into a broader context: that of the requalification of the border between Old Montréal and downtown, known as the Champ-de-Mars sector. Destructured by the construction of the expressway in the 1970s, this area's role in the city needs to be redefined, particularly after the construction of the CHUM-CRCHUM and based on the re-linking work begun further west in the Quartier international de Montréal (QIM).

Over the short term, the Champ-de-Mars Sector Project (in the yellow box on the diagram) encompasses three major public projects on its territory:

- the redesign of blocks I and II in **Square Viger**, as part of enhancements to this identity-building public space;
- the redesign of Place Vauquelin, which is part of the **Cité administrative**;
- the design of Place des Montréalaises, a new public place **adjacent to the Champ-de-Mars métro station**; this is the subject of the present competition (in the red box on the diagram).

Identification of the public spaces being planned for the Champ-de-Mars Sector Project.

Square Viger

Square Viger was Montréal's first major public space. While it was created back in the 19th century, its current design dates to the 1980s, when the Ville-Marie Expressway, built underground, caused the square to be rebuilt on a slab space. Square Viger is currently a place with very low traffic, associated with marginality and seen as unsafe, despite remaining a significant and even pioneering location in terms of including art in public space. The two westernmost blocks of Square Viger—blocks I (Chénier) and II (Daudelin)—are currently being transformed, and will be completely redesigned. Their use as agora-type gathering spaces will be strengthened, making it possible to host a range of services and activities. It is therefore assumed

that these blocks, located directly east of the CRCHUM, will be used by many workers. For more details about Square Viger, see the appendices available online.

Block II of Square Viger

The Cité administrative

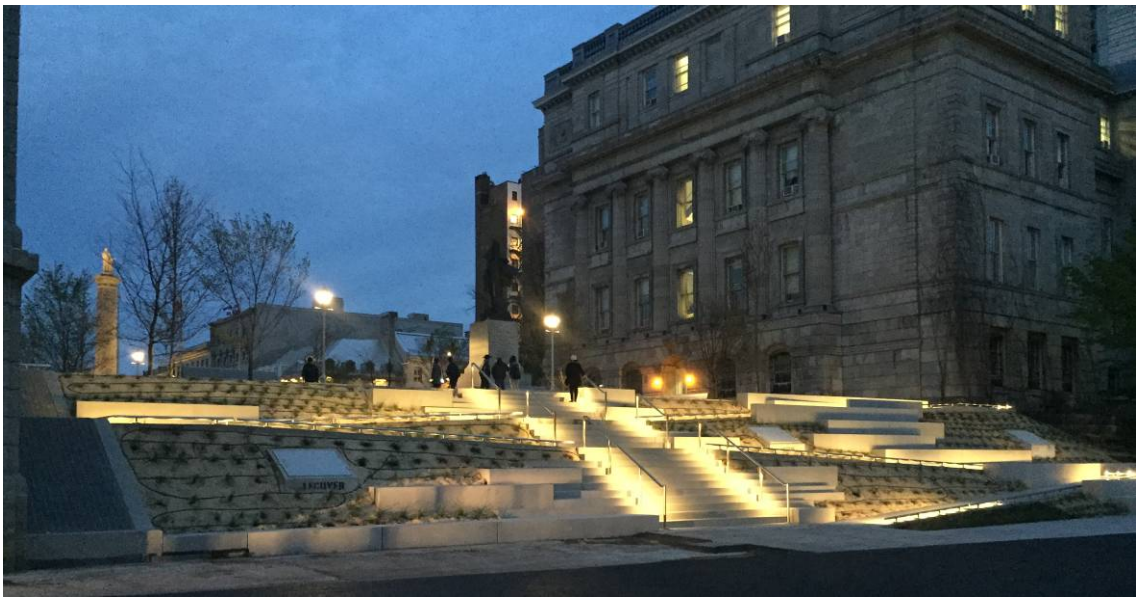
The Cité administrative is an ensemble of buildings that includes a number of major public institutions, including City Hall, the old and new courthouses, and the municipal court and the Ernest-Cormier building (appeals court). It also includes significant public spaces, such as Place Vauquelin and Champ-de-Mars. It is a place of prestigious monuments and the expression of power, and intended for the public at large. As the main entranceway into the historic heart of the city, the Cité administrative opens onto the city, and the functions and civic spaces concentrated here provide an experience rich in memory and new discoveries, well used by citizens and visitors alike. Excerpts from the Cité administrative design plan are available in Appendix F.

The redesign of Place Vauquelin is the first achievement in a design plan that aims, among other things, to better delimit the institutional ensemble of the Cité administrative while also better showcasing the urban face, both toward Rue Notre-Dame and toward Champ-de-Mars.

Cité administrative –Design vision for 2025

Within the Cité administrative, **Place Vauquelin** has been redesigned to strengthen its role as a forecourt for City Hall and as a lookout toward both the old city (Old Montréal) and the modern one (*faubourgs* and downtown), as well as toward Mount Royal. The space has been re-levelled with Rue Notre-Dame and given a universal access point from Champ-de-Mars to improve mobility connections.

The Cité administrative also includes **Champ-de-Mars**, where one can see the vestiges of Montréal's fortifications dating from the 18th century, the anchoring features of this space. Remodelled many times throughout history, these vestiges constitute an important way of bearing witness to Montréal's history. They were exposed for the festivities surrounding Montréal's 350th anniversary, which led to a serious degradation of their state. Work was done on the vestiges in 2011 to consolidate and showcase them. The project consisted of adding a coping, stabilizing and reinforcing the stones, and lighting them. This space will be redesigned in subsequent phases of the work to improve the Cité administrative, with Place Vauquelin as its first phase. The space also includes a grassy berm with lines of trees that mark the interface with Rue Saint-Antoine, Rue Gosford and the Allée des Huissiers. For more detail on the Cité administrative and Place Vauquelin, see the appendices available online.



Redesign project for Place Vauquelin

The spaces surrounding the Champ-de-Mars métro station

The expressway covering calls for the creation of a completely new public space, place des Montréalaises, adjacent to the Champ-de-Mars métro station. This is the aim of this competition. Besides the residual spaces and the components linked to the expressway and métro station, the site also includes **Place Marie-Josèphe-Angélique**, located between Avenue de l'Hôtel-de-Ville and the Champ-de-Mars métro station, south of Avenue Viger Est. The park, contiguous with the métro station, was built in the early 1990s for the festivities surrounding Montréal's 350th anniversary. In 2012, the space was named in honour of Marie-Josèphe-Angélique. It remains underused and poorly maintained, however. For more details on the future public space adjacent to the métro, see the appendices available online.

Areas surrounding Champ-de-Mars métro station

3.2 HISTORICAL CONTEXT OF THE AREA AND OF THE SITE

The urban fracture between the historic city and the modern city bears witness to the historical evolution of the Ville de Montréal's territory. The timeline of the area's metamorphosis can be defined in seven major phases:

- From 1642 to 1800 – **The *bourg***
- From 1801 to 1850 – **The *faubourgs***
- From 1851 to 1880 – **The city's expansion**
- From 1881 to 1914 – **Urban densification**
- From 1915 to 1950 – **The metropolis**
- From 1951 to 1980 – **Major infrastructures**
- From 1981 to today – **The scarring of the city**

The content of these phases is described on page 10 of the document *Project Secteur Champ-de-Mars – Diagnostic, vision et objectifs d'aménagement*, available in Appendix A (in French).

In parallel with the area's historical evolution, the site has experienced five more specific periods of evolution.

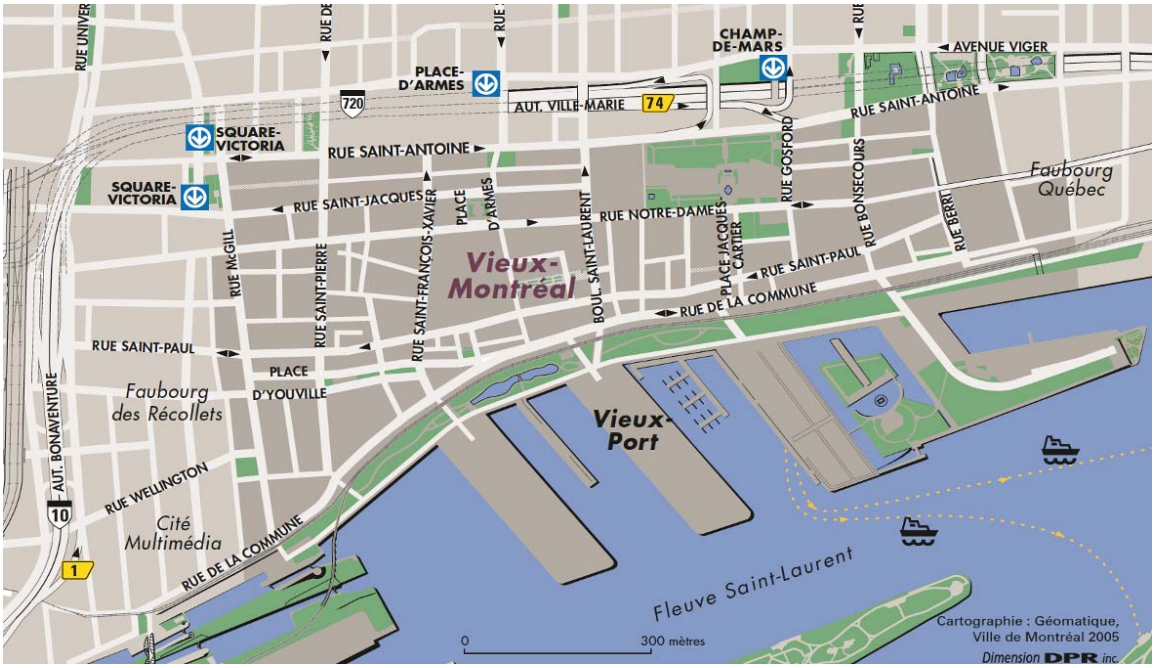
- From 1685 to 1850 – **The birth of the *faubourgs***
- From 1851 to 1880 – **From *faubourgs* to neighbourhoods**
- From 1881 to 1950 – **From neighbourhoods to downtown**
- From 1951 to 1980 – **Mutations of the *faubourgs***
- From 1981 to 2014 – **Rebuilding ties between Old Montréal and its periphery**

The content of the space's historical phases is described in the excerpt of the document *Projet Secteur Champ-de-Mars – Le site aux abords de la station Champ-de-Mars* in Appendix B (in French).

3.3 THE MONTRÉAL HERITAGE SITE

The Montréal Heritage Site encompasses the formerly fortified city, parcels of the former *faubourgs*, the Pointe-à-Callière area, and the Old Port. The neighbourhood is delimited by Rue Saint-Antoine (north), the St. Lawrence River (south), the Faubourg Québec (east), and the Faubourg des Récollets (west). The site is characterized by the density of its urban fabric, the imposing dimensions of the buildings, and the diversity of functions within them. It includes 557 buildings and vestiges built at various points from the 17th century to the 20th. Warehouses, religious buildings, office buildings, banks, company head offices, courthouses, and other institutional buildings form a diversified architectural landscape, harmonized by the omnipresence of grey limestone. It includes numerous official heritage assets and a number of archeological sites, demonstrating its occupation by First Nations people, Europeans, and Quebecers.

The new public space is located outside the Montréal Heritage Site, but the landing point for the new pedestrian overpass will necessarily be located on Champ-de-Mars, so within the bounds of the Montréal Heritage Site. The linkage between the new public place, the overpass and the Cité administrative (and more particularly Champ-de-Mars) is a key concern.

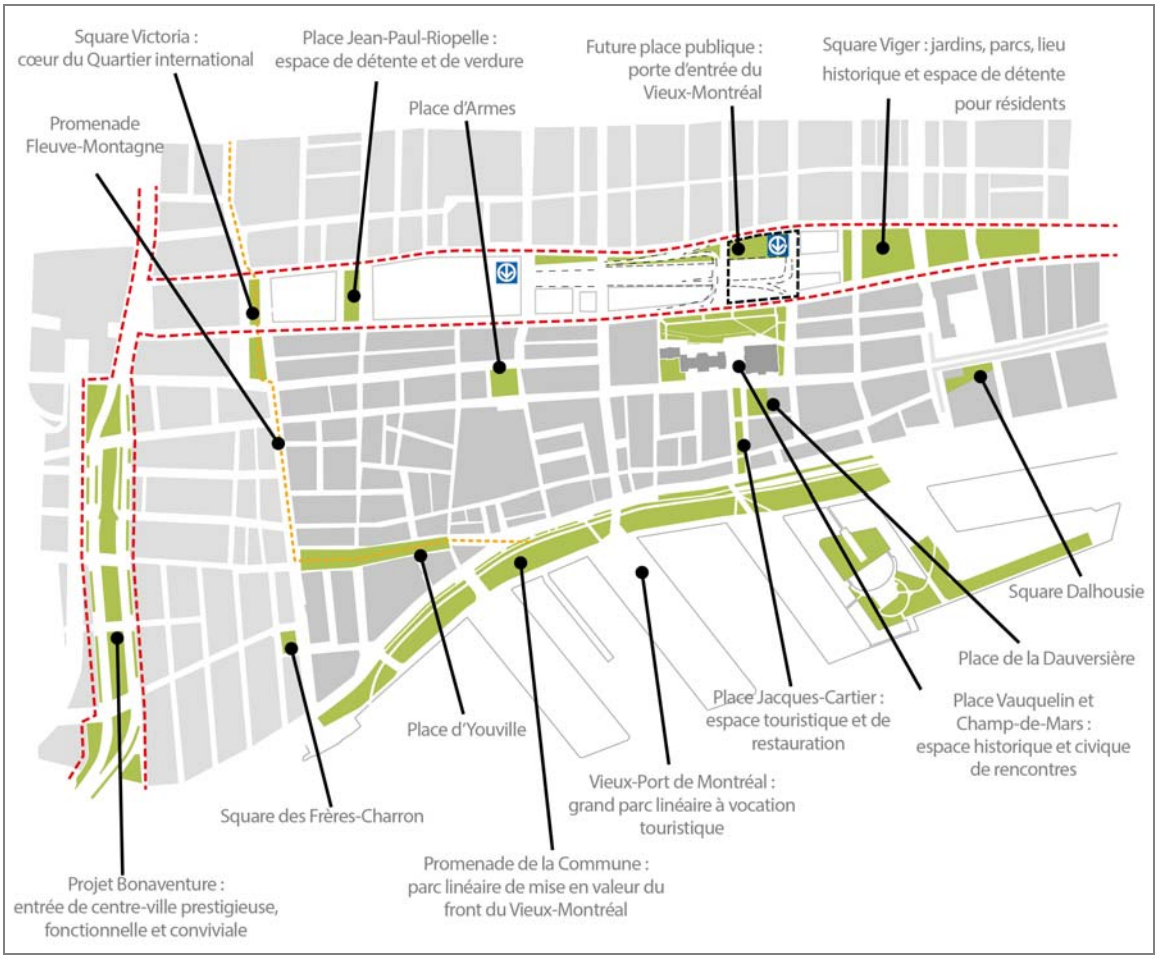


The Montréal Heritage Site, represented in dark grey.

3.4 NETWORK OF PUBLIC SPACES

The new public place adjacent to the Champ-de-Mars métro station is part of a network of public spaces delimiting the historic city and the modern city (*faubourgs*), which extends beyond the Champ-de-Mars sector. Some of these public spaces result from the expansion of the historic city, while others result from the redefinition of the traces left by the passage of Ville-Marie Expressway. The covering of the expressway, which began further west in the 1980s, made space for the Quartier international de Montréal (QIM) and for a series of places and squares (Square Victoria, Place Jean-Paul-Riopelle and Square Viger). Taken together, they form a series of spaces linked from east to west by Avenue Viger and Rue Saint-Antoine. Starting from the Champ-de-Mars métro station, there is another series of public spaces, this one oriented north-south. It is made up of Champ-de-Mars, Place Vauquelin, Place De La Dauversière, Place Jacques-Cartier and, lastly, the public spaces of the Old Port.

These two pathways meet at the site where the new public place is to be created adjacent to the Champ-de-Mars métro station, emphasizing its importance as a pivot point at the heart of this network of public spaces; it will help define and unite several of the city's neighbourhoods. A more complete view of the network of public spaces in the Champ-de-Mars sector is available on page 22 of the document entitled *Projet Secteur Champ-de-Mars – Diagnostic, vision et objectifs d'aménagement* in Appendix A (in French).



Network of public spaces

3.5 IDENTIFICATION OF MAJOR INSTITUTIONS

The Champ-de-Mars sector features an exceptional concentration of major Ville de Montréal institutions, which encapsulate the city's evolution at a glance. They include the Cité administrative and its 19th-century built heritage, the modernist construction of the Palais de justice (courthouse), the construction of the Palais des congrès (conference centre) marking the new direction taken in the 1980s, and the new CHUM-CRCHUM (2011–2020), which represents the new generation of major Montréal healthcare institutions.

The Cité administrative

This ensemble includes a number of major institutions, among them City Hall, the old and new courthouses, the municipal court and the Ernest-Cormier building. The grouping made up of City Hall and the old courthouse (Lucien-Saulnier building) represents an exceptional built environment that marks the landscape and provides a grand panoramic view in its own right of the surrounding Montréal landmarks.

Palais des congrès

The Palais des congrès, located to the west, is a symbol of the initial government projects linked to the covering of the Ville-Marie Expressway in the 1980s. The building is a visual landmark for many people, and marks the physical and visual boundary between downtown and Old Montréal. It was expanded in the early 2000s toward the west, and this addition, along with the construction of the Caisse de dépôt et placement du Québec and Place Jean-Paul-Riopelle, greatly contributed to defining the Quartier international de Montréal (QIM).

CHUM–CRCHUM

Over the last few years, the CHUM and the CRCHUM have arrived in the area, just east of the space that is the focus of this competition; construction will continue through to 2020. The arrival of these healthcare institutions represents a major revitalization in terms of occupancy of the area, and thanks to the large number of workers, patients and visitors who will spend time in these places. The two hospitals noticeably change the landscape, which had been unchanged since the 1980s. Their physicality, height, mode of implementation, and accessibility require close dialogue with the new public place that will be adjacent to them. The City is also seizing on the recent addition of this complex to reconfigure the public roads surrounding it.

A more complete view of the major institutions in the Champ-de-Mars sector is available in the document entitled *Projet Secteur Champ-de-Mars – Diagnostic, vision et objectifs d'aménagement*, on page 16 of Appendix A (in French).

3.6 MONUMENTAL CITYSCAPE

The Champ-de-Mars sector, and specifically Place des Montréalaises, provides a panoramic view of the remarkable Montréal landmarks surrounding it. The major east-west axes of Avenue Viger, Rue Saint-Antoine and Rue Notre-Dame also provide views of significant Montréal landmarks, such as downtown skyscrapers, the Jacques-Cartier Bridge, and the Maison de Radio-Canada. At the centre of the space, looking toward the Palais des congrès and Boulevard Saint-Laurent, passersby can enjoy a landscape formed by the meeting of the local structure of the old *faubourgs* and the metropolitan structure of major institutional axes. Further south, a significant monumental landscape features the civic and judicial ensemble of the Cité administrative. The high placement, architecture, size, and number of the civic and judicial institutions bordering Champ-de-Mars contribute to the landscape's monumental character as well as its symbolic and wayfinding value. The remarkable sweeping views result among other things from the unbuilt space created by the presence of the entrenched Ville-Marie Expressway. As well, a by-law

limiting the height of buildings protects and enhances the view of Mount Royal from the Cité administrative, among others.

More complete information about the monumental cityscape in the Champ-de-Mars sector is available in the document entitled *Projet Secteur Champ-de-Mars – Diagnostic, vision et objectifs d'aménagement*, on page 34 of Appendix A (in French).

View of the monumental cityscape of the Cité administrative seen from Avenue Viger

3.7 PUBLIC ART

The territory covered by the Champ-de-Mars Sector Project features an exceptional concentration of artworks, including 55 that are accessible to the general public both inside buildings and outdoors. These works have the potential to be a true art pathway, and could be put into relationship with the landscape, the heritage and the urban design of the area.

The new place adjacent to the Champ-de-Mars métro station will provide enhanced perspectives of the glassworks by Marcelle Ferron, an emblematic artwork inaugurated in 1968. It is an integral part of the métro station's architecture, built by architect Adalbert Niklewicz. Since Champ-de-Mars is one of the métro system's shallowest stations, the glassworks can be appreciated from both indoors and outdoors. The colourful effects produced by natural light shining through the work can be seen all the way down to the platforms, and even inside the métro trains.

A more complete picture of the public art network in the Champ-de-Mars area is available on page 18 of the document *Projet Secteur Champ-de-Mars – Diagnostic, vision et objectifs d'aménagement*, available in Appendix A (in French).

Outdoor and indoor views of Champ-de-Mars métro station

3.8 ARTERIAL SYSTEM

The Ville-Marie Expressway, built in a trench between Avenue Viger and Rue Saint-Antoine, crosses the area from east to west. Its presence means there are numerous underground infrastructures in the area (drainage channels, support walls, emergency exits, ventilation towers, etc.) that may place constraints on surface building. The entrenched expressway also generates a considerable impact on the urban milieu, and creates a negative perception because of the way it slices through the various public spaces and older neighbourhoods.

As well, the presence of many expressway ramps makes the area feel as though it were dedicated to transit, which means the various public spaces are underused. It also harms the dynamic potential of adjacent buildings' lobbies, and interrupts the gridlines of north-south streets. Studies have shown that drivers using Avenue Viger and Rue Saint-Antoine axes tend to perceive these urban arteries of the Montréal network as service roads for the Ville-Marie Expressway, whereas they used to look more like major urban boulevards. This impression is felt particularly strongly in the areas where there are no obstacles to drivers' field of vision (such as along the edges of an off-street parking lot). Photomontages of drivers' field of vision as well as cross-sections of the current configuration of the Saint-Antoine and Viger axes are available in Appendix J.

3.9 MÉTRO SYSTEM

The métro stations in the Champ-de-Mars area are entryways into three distinct areas of Montréal:

- the Quartier international de Montréal (QIM) – Square-Victoria-OACI métro station;
- the historic business area – Place-d'Armes métro station;
- the civic and judiciary core (Cité administrative) and CHUM-CRCHUM – Champ-de-Mars métro station.

This last station, which is part of the project, is located on the Orange line and boasts high traffic made up of workers, residents and tourists. The current traffic is about 6,000 daily users. With the construction of the CHUM-CRCHUM, traffic in the area is expected to quadruple between 2013 and 2020, which will be a major transformation. More information about the métro system and about Champ-de-Mars station are available on the STM website.

3.10 WALKING AND BICYCLE PATHS

While the site acts as a key access point to Old Montréal, its pedestrian and bicycle paths are lacking in terms of both safety and user-friendliness.

As mentioned earlier, for drivers, Avenue Viger and Rue Saint-Antoine are considered more as access roads to the expressway than as streets set up to be cyclist- pedestrian-friendly. The speed of vehicles, the presence of highway ramps and the lack of sidewalks and pedestrian crossings in many places are disruptive to pedestrian routes. Note that there is no sidewalk on the southern portion adjacent to the place, due to the presence of the Saint-Antoine ramp.

Above-ground, there is currently no clear, direct and safe pedestrian pathway linking Champ-de-Mars métro station with Old Montréal. To travel between them, users must make a detour via Avenue de l'Hôtel-de-Ville to the west, or via Rue Saint-Denis to the east. The underground network, with the City pedestrian tunnel (north-south), offered an alternative to the outdoor routes, but this link will be destroyed because of the need to dig out the Saint-Antoine ramp so that it can be partially covered. Studies nonetheless show that about 800 people used the City pedestrian tunnel on a daily basis. We also note a pendulum effect between foot traffic at morning

rush hour (toward Old Montréal) and at afternoon rush hour (toward Champ-de-Mars métro station).

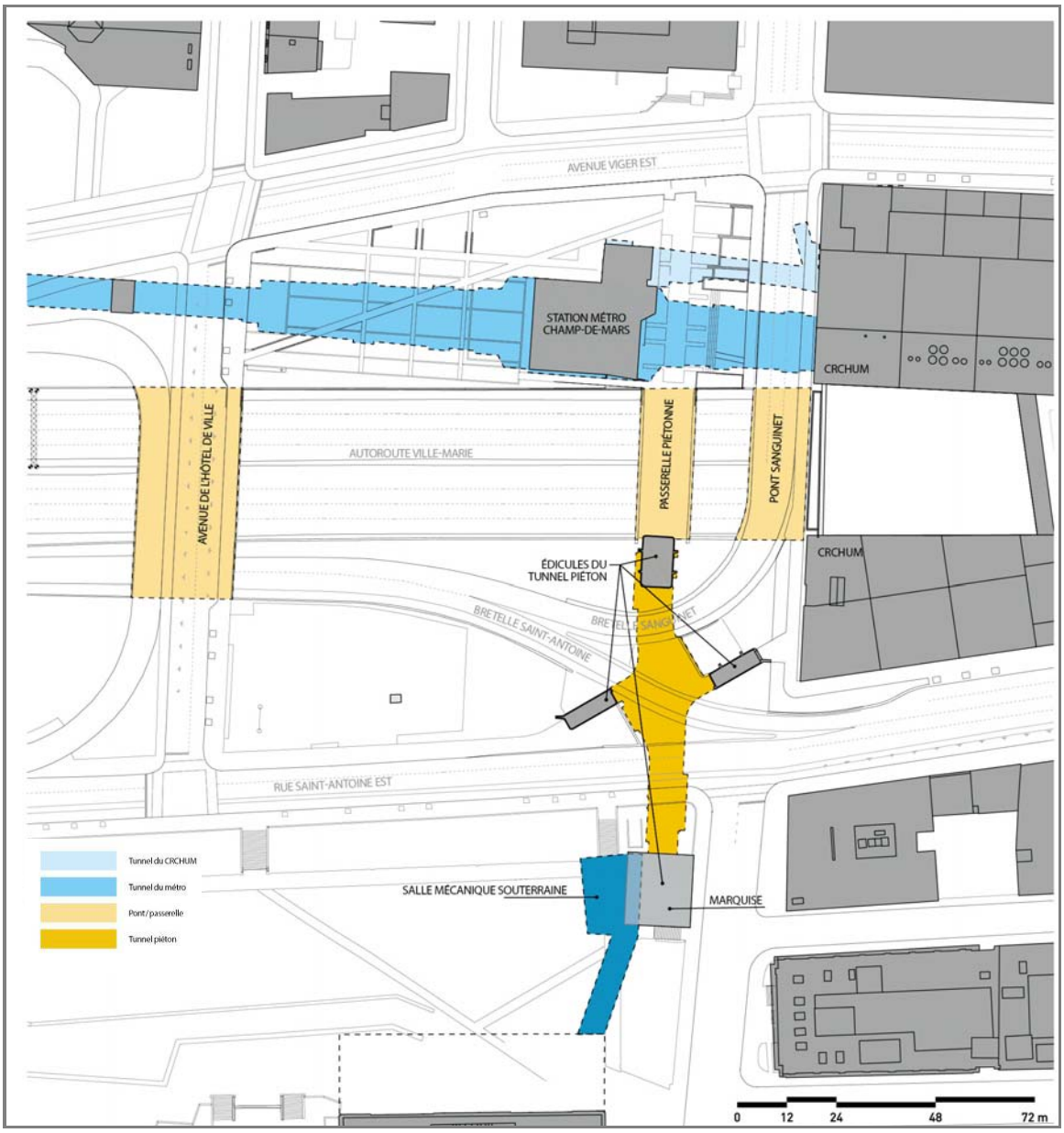
East-west bicycle paths are located on Avenue Viger and Rue Saint-Antoine. The north-south axis, for its part, is served by a bicycle path located further east, on Rue Berri. The area is well served by the Ville de Montréal's BIXI bike-share system, as there are three stations within a five-minute walk of Champ-de-Mars métro station.

3.11 BRIDGES AND TUNNELS

Four entities share the property: the City de Montréal, the STM, the MTMDET, and a private owner (see the property plan in Appendix G, in French). Various above-ground and underground structures are present on the site or its periphery, each belonging to one of these owners:

- the **CRCHUM pedestrian tunnel** linking the Champ-de-Mars métro station access structure to the CRCHUM's Viger tower;
- the **STM métro tunnel**, which includes a wider section at the platform level and crosses the site on the east-west axis;
- the **City pedestrian tunnel** and its four access structures, located at the end of the existing pedestrian overpass (north); along Rue Gosford (south); at the intersection of Rue Saint-Antoine and the CRCHUM (east); along Rue Saint-Antoine near Avenue de l'Hôtel de Ville (west); this tunnel and its access structures will be demolished as part of the project to cover the Saint-Antoine ramp;
- the **existing pedestrian overpass** linking the walkway next to the Champ-de-Mars métro station to the City pedestrian tunnel (this overpass was demolished by the MTMDET as part of project to cover Ville-Marie Expressway);
- the **Avenue de l'Hôtel-de-Ville bridge**, which also includes part of the U-turn access ramp to the westbound expressway; and
- the **Sanguinet bridge**, linking the ramp of the same name to Avenue Viger.

The placement and features of these bridges and tunnels have considerable influence on the design of the space, and clearly illustrate the importance of transit on the site. As well as these bridges and tunnels, a functional machinery room is located under Champ-de-Mars, adjacent to the southern access structure of the City pedestrian tunnel and linked underground by a tunnel to City Hall. This machinery room houses a generator, reservoirs, pumps, and ventilation units, lead to the outdoors via a steel grille located in the berm on Rue Saint-Antoine. As well, mechanical ventilation wells are located in the outdoor awning. Changes to this machinery room will take into consideration the implementation proposal for the overpass structure made by the Winner of this competition. The demolition of the southern access structure of the pedestrian tunnel and the awning as well as the necessary changes to the machinery room are not part of this competition. These works may, nonetheless, be carried out in parallel with the works required to construct the overpass.



Map of existing bridges and tunnels on the site

3.12 NEIGHBOURING POPULATION

The chief sociodemographic characteristics of the population within the borders of the Champ-de-Mars sector are:

- **a small resident population in the area due to the presence of institutions** – the Champ-de-Mars sector has only 5,000 residents, or about 6% of the borough of Ville-Marie's population;
- **an aging population** – 17% of residents are aged 65 and up, compared to 13.5% for the rest of the borough;
- **a population made up mostly of renters** – about 63% of residents are renters;

- **educated residents who are mostly francophone** – about 57% of the population speaks French at home;
- **a relatively rich area** – the average annual household income is $71,983, or $12,000 more than the rest of the borough of Ville-Marie;
- **the presence of a marginalized homeless population** in many public spaces in the area.

4. VISION, VOCATIONS AND DEVELOPMENT APPROACHES

4.1 VISION

The codesign process (Appendix C) helped to define the project's design vision:

The new place will be a complementary space to a network of high-quality public spaces, between the public spaces of the Bonaventure project and Square Viger. Recognized as being one of the main entryways to Old Montréal and a major transit space, the new place is also designed as a space that's welcoming, suited for gatherings and discoveries, and set to become a true pivot point linking the old city to the new city. Activity in the area is structured by the Champ-de-Mars métro station, which generates traffic, and by the various possibilities for public engagement with and use of the site, but also by existing service points allowing users to obtain information, meet, relax and eat. High-quality design, optimized accessibility and versatility ensure that the space is democratic, participatory and inclusive. Innovative construction and spatial design techniques maximize opportunities for greening, especially on the slab covering the expressway trench.

4.2 VOCATIONS

Three vocations are set out for the new public place:

A welcoming pivot point: The place is located at the junction of two major axes, one linking the modern city to the Montréal Heritage Site (Old Montréal), and the other consisting of a linear network of public spaces. Anchored by the métro station, the place is a special welcoming space conducive to socializing and use by tourists, workers, residents, and other area users. Signage is clear and visible, making it easy for users, especially tourists, to find their way to nearby sites of interest. Versatile and universally accessible, adapted for people with mobility and visual impairments, the space allows for combinations of functions, encouraging optimum user engagement year-round. The space is ready to host services including a restaurant, public washrooms, a water fountain, and storage space. It includes rest areas and a play area for children. The place's more specific programming will be provided to finalists in the second phase of the competition. Although the slab covering the expressway following the MTMDET work poses challenges, all in all it is a site equipped with landscaped areas and green spaces, designed for collective use, and helping to mitigate the heat island effect.

A gathering place: Although the place is a high-traffic transit area anchored by the métro station, it is also an inviting space where people can linger. It is flexible and versatile, conducive to hosting seasonal activities and short-duration non-recurring events on a small scale, with respect for the adjacent institutions. Infrastructure and technical equipment is present, allowing for short-term installations. The place is located at the foot of City Hall, encouraging democratic expression, inclusion and civic participation. The inclusion of collaborative processes in the management of public spaces is illustrated in the fact that the everyday operation of the new space is in the hands of users. The site layout and planned activities encourage cohabitation between different users and social groups, including the homeless population. Highlighting of one or more landmarks and installation of distinctive street furniture complementary to that used in the

nearby Quartier international de Montréal (QIM) help ensure that the space is a favoured gathering place.

A space for discovery: The new space functions as a lookout, a window onto the surrounding urban landscape, enabling observers to engage with emblematic landmarks in the city centre (e.g., the Palais des congrès, courthouse, City Hall, municipal courthouse, CRCHUM, Jacques Cartier Bridge). This contemplative dimension makes it a choice site from which to set out to explore the city and experience "Montréality." The Champ-de-Mars métro station is the focal point: the entrance structure's modern architecture and the esthetic appeal of the glassworks by Marcelle Ferron are celebrated. The proposed spatial planning elements stand out for their innovative and sustainable character, both in terms of construction and maintenance. The educational function of the space allows users to learn more about its innovative features. We strongly encourage area institutions to participate in order to further this mission. Through innovative partnerships, Montréal's identity and savoir-faire are highlighted and can be embraced by one and all.

4.3 DEVELOPMENT APPROACHES

The diagnostics for the Champ-de-Mars area and the codesign process helped determine five guiding principles. These in turn led to a series of questions summarizing the design challenges and issues for the new public place:

Citizen usage of the area: How can we create an emblematic, distinctive public place that will confer a unique character on this currently non-existent space? How can we design an attractive and welcoming space that's versatile and safe? How can we encourage socializing and cohabitation among various user groups, particularly marginal populations? Beyond the transit function, what types of services and equipment should we include to encourage usage and traffic in the place without providing continuous activity programming? How can we transform this entryway to Old Montréal into a lively, animated space? How can we ensure the location is used year-round?

User-friendliness of mobility connections: How can we visually and physically link Champ-de-Mars to the métro station, and consequently to the rest of the city? What design features should we include to reach and maintain maximum porosity for the place as a whole? How can we build thresholds as welcoming access points that encourage the convergence of people's movements to and through the place? How can we ensure optimal cohabitation between pedestrians and cyclists who move along the edges of the place? What features must we include to ensure comfort and efficiency for various types of mobility? How can we ensure the new public place is safe and universally accessible?

Quality of urban design: How can we design with quality and sustainability in mind while also creating cooling spaces? Faced with the specific climate conditions to which the site is exposed, what measures could contribute to improving the comfort of the place's users? What technical innovations could be included despite the constraints of building on a slab? How can we create coherence with the design of the surrounding public area (QIM, CHUM, Avenue Viger, Rue Saint-Antoine, Square Viger, etc.)? How can we encourage street entertainment alongside Avenue Viger and Rue Saint-Antoine? How can we make the relationship between the public area and the built environment more dynamic by seizing the opportunities provided by the new CHUM and CRCHUM buildings?

Showcasing a rich and diversified heritage: What physical and visual ties should we emphasize to showcase the rich heritage associated with the institutions in Old Montréal and nearby neighbourhoods? How can we extend the experience of walking along the east-west arteries, particularly Rue Saint-Antoine, which ties together a number of public spaces and a

sequence of heritage ensembles? How can we showcase the Champ-de-Mars métro station and its glassworks?

Highlighting the monumental cityscape: What designs can we include to preserve the views of the monumental cityscape created by the Cité administrative and downtown buildings? How can we ensure that the new place benefits from the visual separation created by the entrenched expressway to be highly visible and attractive from its periphery? How can we highlight the experience of the slope up to Champ-de-Mars as an entryway to Old Montréal?

5. OPERATIONAL AND TECHNICAL NEEDS

5.1 PLACE NAMING

The Ville de Montréal officialized the demonyms “Montréalais” and “Montréalaise” (in English, “Montrealer”; the two different words in French distinguish between male and female residents) in April 2015. In everyday usage, this demonym supplanted the older word “Montréaliste” over the course of the 19th century. It designates all people living in the metropolis, regardless of their origins. The adoption of a toponym in homage to women Montrealers helps to recall the memory of all the women erased from history, whose names we will never know, despite their contributions to the community.

The name “Place des Montréalaises” was recommended for the new public place as part of the *Toponym'Elles* operation established by the municipal administration to promote women’s representation in Montréal’s toponymy.

5.2 COMMEMORATION OF MARIE-JOSÈPHE-ANGÉLIQUE

The new public place must make it possible to continue commemorating Marie-Josèphe-Angélique in the current commemorative space located at the intersection of Avenue Viger Est and Avenue de l’Hôtel-de-Ville, west of the métro station. As such, the competition calls on candidates to reflect on this commemoration in order to do justice to this figure and to this part of Montréal’s history within a new, expanded public place. The existing design of Place Marie-Josèphe-Angélique does not need to be conserved as part of the project. Only the placement and the toponym of the place may not be changed.

The toponym “Place Marie-Josèphe-Angélique,” given in 2012, aims to recall the story of Marie-Josèphe-Angélique (Madeira, Portugal, circa 1705–Montréal, 1734), who was the slave of a Montréal merchant. In 1734, this woman was accused, found guilty and condemned to death for having set a fire that destroyed half the city. Thanks to recent historical research, it is now understood that there was insufficient evidence to find Marie-Josèphe-Angélique guilty. Adjacent to the Champ-de-Mars métro station, Place Marie-Josèphe-Angélique reminds everyone that slavery existed in Montréal’s history, and reminds us of its consequences on those who suffered under it. The toponym is not changed by the new naming of Place des Montréalaises.

5.3 PROGRAMMING

The participatory codesign process initiated in September 2014 helped define the needs for the new public place (see Appendix C, in French). The nature of the site’s location, where major institutions coexist with residential spaces and the Old Montréal tourist area, leads many users to pass through the area. As such, it has two function and usage profiles:

- the neighbourhood profile—a living space—that meets residents’ needs;
- the city, or downtown, profile—which makes it a transit space.

These two profiles show that not all types of users will use the new place for the same reasons or at the same times of day. As such, the versatility and flexibility of the space, as it seeks an identity, are of prime importance year-round.

To meet the needs expressed for these two different profiles, the new public place's design must make it possible for the following activities to take place. Users must be able to:

- Get their bearings easily and find tourist information;
- Find each other quickly, using the space as a meeting spot;
- Get to or arrive from Old Montréal as directly as possible with the minimum number of obstacles and conflict areas;
- Park their bikes in a safe, easy-to-access space;
- Sit comfortably to eat or drink;
- Eat, drink or relax in a place where consideration has been given to climate comfort;
- Have access to clean, safe bathrooms;
- Relax and simply contemplate the view;
- Use street furniture that makes it possible to socialize or be more private;
- Let children have fun in a safe and stimulating space;
- Use the space for moderate physical activities that require little or no permanent equipment;
- Freely express themselves.

Further, the space must make it possible to:

- Temporarily set up activities and install equipment in a versatile space that provides all the necessary commodities (electricity, anchor points, access to water, etc.);
- Safely store materials useful to activities in the place (40 m^2);
- Safely store the place's maintenance equipment (20 m^2);
- Use a space or kiosk to sell consumable products, temporarily or permanently;
- Use a space or kiosk to provide services (to be defined) to citizens, tourists, workers, etc. (e.g., bicycle repair, tourist information, or anything else that could enliven the place).

Given the proximity of other existing or planned public spaces in the area, the new place must be designed to include features that are distinct from or complementary to activities that are already established or planned. The most up-to-date information available about the spaces currently being planned is available on the Champ-de-Mars Sector Project website.

The proposed features of the new place must encourage its users to take charge of its everyday operation, without official or regular activities programmed. The relationship with nearby institutions (e.g., CHUM-CRCHUM, City Hall) must be rendered dynamic in order make them part of the place's happenings. For example, the designers must propose permanent or semi-permanent kiosks and integrate them into the place's construction. Operational from April to October (seven months a year), they will make it possible to provide various services to users, for both restaurant services and services for tourists, workers or residents (e.g., bicycle repair, tourist information, public market, entertainment). A maximum of two kiosks, movable or otherwise, must be included in the concept. The proposed architecture must not allow for squatting or favour the creation of spaces where people could settle in and sleep. The kiosks' visual signature must reflect their integration into the area and work with the place's identity, in terms of the materials proposed, the form and the placement. As needed, the kiosks must be hooked up to utilities (water, electricity). More precise programming elements may be provided to finalists in the second phase of the competition.

All design proposals that meet the needs of this subsection must fit into the overall project budget presented in section 7. Note that it is crucial to confirm the feasibility of the technical hook-ups required for all activities, ensuring versatility and adaptability.

5.4 HIGHLIGHTING THE GLASSWORKS BY MARCELLE FERRON

The proposed designs for the vicinity of the métro station must help highlight the glassworks by Marcelle Ferron. Sufficient visual space must be maintained around the edges of the station access structure, making it possible to contemplate the full artwork. On a broader scale, there are also opportunities to highlight one or more artworks that are located in the Champ-de-Mars sector as a whole.

5.5 INCLUSION OF A NEW PEDESTRIAN OVERPASS

The new pedestrian overpass aims to link Champ-de-Mars to the métro station of the same name with a direct, user-friendly and universally accessible channel that makes it possible to span the physical barrier created by the Saint-Antoine ramp. This approach aims to create a natural movement between Place des Montréalaises and Champ-de-Mars. The designer must take care to integrate the overpass into the urban landscape; solve construction, accessibility and comfort issues; and address the technical feasibility and maintenance conditions of such a work.

In addition to its functional nature, the overpass should integrate well within the context of the exceptional surrounding heritage and landscape, much like a lookout that allows people to discover the city's points of interest. In addition, authorization from the Ministère de la Culture et des Communications (MCC, or the Québec ministry of culture and communications) will be required to validate its form and implementation within the limits of the Montréal Heritage Site. It should present design qualities, refinement, and an expression of lightness so as to minimize its visual impact and integrate into the Champ-de-Mars setting in a harmonious and respectful way. We are seeking designs with a light touch, and that are sober and reserved.

The overpass must be open and provide new perspectives on the area's sites of interest (e.g., the Cité administrative, the Champ-de-Mars métro station access structure, Mount Royal, downtown, the Jacques-Cartier Bridge). Considering Montréal's climate conditions, this choice requires that solutions be sought in order to ensure users' safety and comfort. Solutions such as a non-slip surface and heated bridging will be required to avoid the need for manual maintenance, which would be complex on such an overpass. Use of de-icing salts is prohibited. A mechanical room, necessary in the case of heated bridging, must be included in the design. The storage spaces required for maintenance of the place may be included in the same building. The residual spaces of the City pedestrian tunnel's south access structure, contiguous with the existing mechanical room, may be reused for this purpose. The potential constraints related to wind behaviour in the area must also be taken into account (see Appendix K, in French).

The following recommendations for integration were developed in concert with the MCC, and the project will be analyzed on this basis when we request authorization to build the overpass. We wish for the overpass to be implemented on the north-south axis, east of the Cité administrative, parallel to Rue Gosford, away from the former Sanguinet ramp's right-of-way. The overpass must help strengthen the role of Rue Gosford, which is called upon to become a veritable entryway to Old Montréal. It will also serve as an entry point to Champ-de-Mars at its north-east corner. It must play a determining role in the functional, safe reorganization of foot traffic on Rue Saint-Antoine and Rue Gosford and on the Champ-de-Mars esplanade by working with the high promenade around the esplanade. It is key that the work proposed south of Rue Saint-Antoine, in the Montréal Heritage Site, be subordinate to the designs and characteristic elements of Champ-de-Mars and that it follow the principle of minimal intervention.

The overpass's integration must respect, but not be limited to, the following guidelines:

- limited intervention: the overpass should only "land" or "rest" on the north-east corner of Champ-de-Mars;

- the overpass must work with existing and planned traffic schemas from the *Plan d'aménagement de la Cité administrative* (Appendix F, in French);
- the views from and of the municipal court building must not be impeded (e.g., by furniture, signage elements or other elements in the overpass's extension or elsewhere on Champ-de-Mars);
- the fortifications and built front of the monumental ensemble (City Hall, Lucien-Saulnier building, etc.) must remain dominant visual elements;
- the topography of the berms (Saint-Antoine and Gosford) must not be changed, and must remain grassed; the articulation of the Gosford–Saint-Antoine corner must be maintained, among other methods by a line of trees;
- there must be addition of a plot or sub-space within Champ-de-Mars and no construction of accessory buildings;
- the overpass must be of a contemporary design, and not seek to integrate through mimicry or pastiche.

This overpass must provide optimal space under its structure to facilitate east-west travel and must avoid creating sub-spaces or dividing up the new public place. It must help solve possible problems that might flow from delinquent occupation on or under the structure. The underside of the overpass must also be considered from the pedestrian viewpoint and that of drivers on Rue Saint-Antoine, among others.

Feasibility studies have evaluated the various overpass options (Appendix H, in French). The overpass design is up to the designers, who must demonstrate their proposals' urban integration and technical feasibility.

5.6 MOBILITY OPTIMIZATION

The spatial planning must encourage movement toward and through the new public place while favouring convergence toward the place's centre. Visual and physical spaciousness is desirable in the Rue Sanguinet axis to encourage foot traffic alongside the CRCHUM, in the right-of-way of the closed Sanguinet ramp. This space must also be reclaimed and included in the new public place.

The project must also include spatial planning that attenuates the presence of the Saint-Antoine ramp and the Ville-Marie Expressway. The objective of partially covering the Saint-Antoine ramp and including it in the place's design is to make it such that users forget the presence of the expressway exit and perceive it is little as possible, especially between Avenue de l'Hôtel-de-Ville and the new pedestrian overpass. The less pedestrians and cyclists are exposed to vehicle traffic, the safer they will feel. The project must take into account the three public streets that circumscribe the site; however, it must be functional within the limits of its property without requiring that work be done on the adjacent sidewalks and public streets. The place is bordered by a sidewalk to the north and west. To the south, however, given that it is impossible for a pedestrian to safely cross the junction between the Saint-Antoine ramp and its namesake street, there is no sidewalk adjacent to the place. The place, to the south, must therefore be configured to prevent users from having easy access to Rue Saint-Antoine and from crossing it at prohibited points.

Considering the nearby bicycle paths, spaces for bikes and BIXIs must be included in the design and be easily identifiable and accessible. We encourage other useful equipment for cyclists (e.g., racks or secure spaces, tools). The spatial planning must facilitate movement to and from the nearby bicycle paths while minimizing sources of conflict with other types of mobility (pedestrians, motor vehicles) in and around the place.

All physical links built with the Champ-de-Mars and the Cité administrative must be coherent and respectful of the Montréal Heritage Site.

Lastly, the project must consider the spatial-planning orientations set out by the City for the public streets alongside the site. The materiality is inspired by the constructions in the Quartier international de Montréal (QIM), farther west. The general intention is to extend this materiality along the arteries of the Champ-de-Mars sector. The project to redesign the public area around the CRCHUM and the CHUM encapsulates this (see Appendix G, in French), and the related technical specifications will be made available to finalists as needed.

5.7 UNIVERSAL ACCESSIBILITY

The Ville de Montréal has created a universal accessibility policy for all areas of municipal activity, including landscape architecture and citizen services. Universal accessibility covers all aspects of people's lives, and is based on respect for all citizens' rights. Founded on an inclusive approach, universal accessibility allows everyone, regardless of their ability, to make identical or similar autonomous and simultaneous use of the services provided to the population as a whole As such, universal accessibility must be considered and included from the start of the project's design. It will be conceived of as an improvement to the pedestrian experience for all users and across the entire site, understanding that the needs of people with reduced mobility reveal those of the whole population.

The following directives must be applied for movement:

- As much as possible, the pathways accessible to people with reduced mobility must be the same ones as those for other citizens, to provide an identical or similar experience to all users;
- The pathway must be straight, free of all obstacles, and at least 1,800 mm wide; if this width is impossible to obtain, a width of 1,500 mm is acceptable provided that spaces are designed such that a user with a motorized mobility aid has sufficient space to make 180-degree turns;
- The pathway must be free of steps and protrusions more than 30 mm high; any protrusion between 13 and 30 mm must be bevelled.

For street furniture:

- The site elements must be detectable using a white cane, and protruding elements must be avoided between the heights of 300 mm and 2,030 mm;
- People with motor impairments or who use wheelchairs must be able to use the street furniture (e.g., a senior citizen will have an armrest to help them get up), or be able to manoeuvre and settle in around them (e.g., a person using a wheelchair can stop nearby and enjoy the space with their friends);
- Pathways must provide visual and tactile contrasts (different textures or materials) that can be perceived by people with visual impairments; in vast spaces, seek to create "Ariadne's threads" to help orient people.

Temporary or permanent signage:

- Information must be repeated across various supports (visual, auditory, tactile) to make it accessible to all users, regardless of their ability to hear, see, move around, etc. For example, use sans-serif typography to make reading easier, with a contrast of at least 70% with the background;
- Information must be accessible to people who are short or who use a wheelchair;
- Information technologies may be used, given that their use is more and more widespread among people with reduced mobility.

5.8 CLIMATE AND ENVIRONMENTAL COMFORT

The project must ensure pedestrians' comfort and safety, minimizing all possible nuisances (e.g., wind impact, heat islands, noise, areas in shadow, physical discontinuities). We are particularly seeking to reduce heat islands on the site. We suggest focussing on planting and on shaded areas by the use of various architectural and landscaping approaches.

In keeping with the vision and vocations for the place, and when context permits, the place's design must aim for optimal planting of trees and plants while favouring the preservation of existing trees. The spatial planning concept must guarantee the required conditions and the appropriate underground space for their healthy growth. Plant choice must be tailored to the site's particular conditions so as to encourage sustained growth, natural support and minimal upkeep. Specifically, the landscaping must opt for a selection that is compatible with the thin substrates resulting from the construction on a slab, and also with fairly rigorous climate conditions (e.g., winds, exposure to de-icing salts). Beyond these pragmatic considerations, it is important that trees and landscape designs fit with the project's identity and provide shaded relaxation areas.

The inclusion of design elements that support the presence of water (e.g., basins, fountains, splash pads) may also be a potential solution, but without being a mandatory input. The presence of a water source may help maintain a comfortable ambient temperature, particularly during heat waves, but also to reduce vehicle traffic noise. The feasibility of any such measure must be demonstrated, especially given the on-slab context, both technically (e.g., servicing, respect for load capacity) and in terms of urban and visual integration.

Furthermore, the proposed design and technical systems for the place must be compliant with the *Climate Change Adaptation Plan for the Montréal Agglomeration 2015–2020*, which presents a picture of the concrete measures taken and commitments made by the agglomeration to handle the climate events that are already affecting the city, and whose impacts will only be exacerbated in the coming years.

In particular, the new public place must be designed as much as possible to meet the adaptation measures for the following phenomena:

- higher average temperatures;
- heavy rainfalls;
- heat waves;
- destructive storms;
- droughts;
- river floods.

A study of the wind behaviour in the area of the new public place was carried out in 2016. The study's conclusions and recommendations (Appendix K, in French) must be taken into account in designing the space and the pedestrian overpass to maximize users' comfort in this space, which is exposed to the wind thanks to its configuration within the urban fabric.

5.9 OPTIMAL WATER MANAGEMENT

The project must present an integrated water management strategy including co-beneficial measures for managing rain water, drinking water supply, and water supply for non-drinking needs (irrigation, fountains).

The project must provide for a net reduction in the flow and volume of the site's runoff. It must favour, in particular:

- control at the source of the quantity and quality of runoff water using best practices for optimal water management;
- recycling and reuse of rain water and grey water;
- reduced irrigation requirements using principles of xeriscaping;
- optimized soil sealing rate (maximum planted surfaces under the constraints);
- planted surfaces placed lower in relation to sealed surfaces;
- drainage of sealed surfaces toward permeable areas (grassy or planted areas) including the placement of retention elements such as drainage wells;
- a surface-water pathway that is as indirect as possible; and
- usage of the technical systems as educational vehicles and social attractions.

The project is not subject to chapter VII.2 on rainwater retention in Ville de Montréal by-law C-1.1 (*Règlement sur la canalisation de l'eau potable, des eaux usées et des eaux pluviales / By-law concerning the piping of drinking water, wastewater and storm water*).

5.10 MATERIALS AND URBAN FURNITURE

Considering the particular conditions associated with on-slab construction, the project authorizes use of custom furniture that complements standardized furniture, in order to create an identity specific to the place. Innovative solutions must be proposed for integrating the furniture, which cannot be directly anchored on the MTMDET covering slab. This furniture must be sustainable, easy to maintain, in sufficient number and designed for all-season use.

As well, the place sits at the heart of the new public-domain work that is being carried out as part of the construction of the CHUM-CRCHUM, which will also extend along certain arteries in the area. The street furniture and the materials used for streets around these buildings are inspired by those in the Quartier international de Montréal (QIM), but with variations on size, shape and colour. This continuity in furniture choice and materials must be taken into account so as to create complementarity in the area. It will also be visible as part of the redesign of Rue Saint-Antoine and Avenue Viger planned for the coming years. Street furniture is listed in a standardized Ville de Montréal catalogue. No new street furniture, signage elements or artworks may be proposed on Champ-de-Mars.

5.11 LIGHTING THE SPACE

The lighting design must be tailored to the ways each sub-space in the place is used, so as to create well-defined ambiences and meet each area's needs. The lighting must also adjust to the hierarchy of traffic networks.

The new public place's lighting must also highlight the glassworks by Marcelle Ferron, while guaranteeing the space's safety and user-friendliness. Functional, safe and esthetically pleasing lighting must be installed, and it must respect the built heritage.

To optimally showcase the Cité administrative, the lighting must ensure its visibility while avoiding direct or excessively bright projection toward the new public place. Please refer to the Plan Lumière du Vieux-Montréal (Old Montréal lighting plan, in French) for more direction on this point. The lighting must avoid creating light pollution, respect best practices such as the recommendations of the International Dark-Sky Association, and avoid creating shadowed areas.

As with street furniture, lighting fixtures are also compiled in a standardized City catalogue. The catalogue will be available to finalists, who must also aim for complementary with the CHUM-CRCHUM designs inspired by the Quartier international de Montréal (QIM).

5.12 ELECTRICITY

The project must include all electrical systems required to support and permit the project's appropriate and safe functioning based on expected usages, and while respecting currently applicable standards.

An electrical panel for the site must be hooked up to the existing Hydro-Québec network for Rue Saint-Antoine. The design of the new public place must respect the City's by-law on cable networks (*Règlement sur les réseaux cables / By-law concerning wired networks*, no. 12-012, article 11). The design must visually integrate electrical equipment.

The minimum electrical supply requirements are:

- 60 amperes, three-phase, 120/208 volts;
- 400 amperes, three-phase, 120/208 volts;
- Camlock type;
- installation of several 110-volt outlets integrated into the design.

5.13 SIGNAGE AND VISUAL IDENTITY

The new public place must establish the space at the exit of Champ-de-Mars métro station as one of the key entry points welcoming people to Old Montréal. To fully include this dimension in the design, the project must feature innovative, clear and visible signage that makes it easy for users to orient themselves and that identifies sites of interest in the area. This signage must take inspiration from the principles of wayfinding, meaning:

- create a simple, coherent and clear visual communication system with short messages;
- provide only the information required, meaning the space, the placement or the route;
- remove all superfluous information;
- provide signage elements at decision points;
- use sightlines to indicate what is coming.

To achieve these objectives, the new public place should aim to include "Montréal à pied" (MÀP) wayfinding kiosks, currently being developed by the City. The MÀP project consists of an innovative system of orientation and wayfinding kiosks for pedestrians that meets international standards of practice. Details on this project will be available to finalists.

5.14 COHABITATION, SAFETY AND COMFORT OF USERS AND AREA RESIDENTS

The project is located at the core of an area featuring great social diversity, and which is used by residents, patients (CHUM), workers, researchers (in the CRCHUM laboratories), tourists, as well as homeless people. As such, the new place must encourage inclusion and harmonious cohabitation among all these users.

The new public place must be designed to be safe at all hours of the day, with year-round traffic. Beyond the traffic related to its transit function, the design must encourage people's use of the space to ensure a natural liveliness. The design must provide good visibility of and from public streets. As such, particular care should be taken not to create spaces that are closed off or hidden from passersby.

The institutions in the vicinity of the place must be taken into account, while mitigating as much as possible the inconveniences that could be brought about by the design and activities of the new public place. Optimal solutions should be proposed to minimize, for instance, noise, vibrations, light-blinding, wind impacts, dust and so forth, both for neighbours and for the new place's users.

5.15 INNOVATION AND SUSTAINABLE DEVELOPMENT

The new public place must propose innovative design, fit in with best practices for sustainability, minimize heat-island effects, and optimize planted spaces. We encourage the re-use of existing site components (e.g., materials, vegetation) if the proposed concept justifies it. The proposed design may take inspiration from recognized environmental certification criteria such as LEED®, Envision™, BREEAM®, Living Future©, and others.

The proposed design and technical systems for the place must be in line with the *Sustainable Montréal 2016–2020 Plan*. Among others, the new public place must be designed in keeping with the following orientations:

- improve air quality and reduce greenhouse gas emissions (GHGs);
- ensure the quality of living environments;
- practice responsible resource management;
- adopt best practices in sustainable development for industrial, commercial and institutional buildings (ICIs); and
- improve the protection of biodiversity, natural milieus and green spaces.

5.16 SMART CITY

The place's design must be in line with the *Montréal Smart and Digital City 2015–2017 Action Plan*, which aims to position the city as a world-recognized leader among smart cities. The new public place must, among other things, include the interconnectivity of all these components through the use of new technologies (e.g., fibre optics, Wi-Fi, smart kiosks).

6. TECHNICAL CONCERNS

6.1 SLAB COVERING OF VILLE-MARIE EXPRESSWAY

An analysis of the characteristics of the MTMDET covering project helped determine several elements that will influence the design of the new public place:

- the structural load limits on the covering slab;
- the restrictions on lateral loads and constraints related to the embankment adjacent to the covering structure that permit no additional load;
- the slab and the resulting restrictions, particularly concerning anchor points;
- the topography of the covering slab, which is irregular and which presents elevations above the level of the surrounding environment;
- the direction of slopes and the placement of the slab's dry wells, which affect the place's drainage design in the part located above the covering;
- the presence of a new above-ground access structure whose siting, dimensions and physical and structural features are fixed by strict conditions related to the tunnel's functional and safety needs (e.g., electrical room, tunnel exit);
- the constraints on vehicle access to the slab based on the structural capacities of the transitions; and
- the presence of joints and their visual and operational impacts.

It is important to note that the covering project's features will be entirely immutable once the MTMDET works are completed. In addition, the competition timeline stipulates that the winning project will be chosen after the Ville-Marie Expressway covering work is finished. In this context, the covering project's characteristics are inputs that cannot be modified.

It is possible that the as-built plans will differ from the information presented in this section. This information is taken from the plans provided by the MTMDET at the time of the November 2015 call for tenders for the covering project. Readings and verifications must be carried out jointly by the Ministère and the City after the covering project is complete. The various plans presented in appendices G and I summarize the set of constraints currently known.

Covering structure

The MTMDET covering project encompasses an area of about 4,760 m² and includes the drilling of posts to the north, south and centre of the expressway and the addition of an abutment on each of the walls. The southern posts and abutments are positioned farther south of the existing support wall. In total, 51 girders are being added above the expressway in each direction. The covering is made up of a concrete slab, 225 mm thick, and a waterproofing membrane protected by a 50 mm layer of bituminous coating.

Load capacity

The maximum structural capacity of the covering slab's built by the MTMDET is 15 kPa of dead load and 12 kPa of non-balanced live load. It is designed to handle the passage of type CL3-625 heavy trucks (30 tonnes).

Lateral loads

The retaining system, including structures newly proposed by the MTMDET, does not include provisions for additional lateral loads relative to the current state of the surrounding land.

It is important to note that this restriction on lateral loads applies to all the covering slab's retaining walls, which increases the technical constraints related to harmonizing the surface levelling. Surfaces could still be harmonized in part by using a light backfill or any other innovative solution to be reached with the MTMDET.

Plantings and other structures

The slab's characteristics favour extensive or semi-intensive planting as opposed to intensive, dense vegetation. The slab is not designed to support buildings, structural supports or permanent kiosks.

The slab presents a topography that offers the best planting potential in its centre. However, dense planting in this spot could run counter to the objective of showcasing the glassworks and affording views toward the monumental cityscape of the Cité administrative. On the other hand, the surfaces at the edge of the slab, near Avenue de l'Hôtel-de-Ville and the Sanguinet bridge, are areas where the level of the slab makes it difficult to include sufficient embankments for planting. In these areas, integrated furniture that includes planting bins are a possible solution.

Topography of the slab and levelling

The slab's topography is one of the most important features conditioning the design of the future place. Whatever spatial planning solutions emerge from the design process, it seems evident that it will be necessary to standardize the levels of the slab to showcase the area, particularly around the métro station access structure. The design approach to levelling must consider the space's vocation above all, along with technical issues related to the boost generated, the load limits on the slab, and the proposed drainage concept.

Sustained efforts have been made to ensure the covering slab is built at the lowest possible level. However, various technical constraints mean that the slab's topography is irregular, and higher in some places than the level of the existing surrounding surfaces, for example next to Place Marie-Josèphe-Angélique and to the métro station access structure, as well as at the junction with the

Sanguinet bridge structure. This higher elevation results from the clearance required between the expressway driving surface and the covering structure, the covering structure's thickness, and the installation of new tunnel ventilation systems. Appendix I, in French, presents the covering project's topography and the potential levelling.

Protection of the covering slab and anchor point restrictions

The membrane to be installed over the slab by the MTMDET aims to protect it from corrosion due to penetration of de-icing salts. The 50-mm bituminous coating will help prevent the membrane from being damaged during the eventual construction work on the place. To ensure the system's integrity, no anchor point may be set into the slab. If anchor points are required, for example for street furniture elements, they must be set into independent foundations and kept separate from the covering structure.

Concrete borders will be placed around the slab, making it possible to retain and direct drainage water from the slab toward the expressway drainage network. Work could be done on these borders, if validated with the MTMDET.

6.2 COVERING OF THE SAINT-ANTOINE RAMP

Studies on the covering of the Saint-Antoine (Berri) expressway ramp are underway. The covering of this exit ramp will mean the north and south sections of the public place can be linked as much as possible. The ramp, widened to two lanes as part of the covering work and the closing of the Sanguinet ramp, remains an impassable physical barrier, and creates a break in the place's design, hence the interest in partially covering it. A maximum length of 68 m can be covered. Carrying out this covering will require a change to the expressway exit slope, which in turn means the existing pedestrian tunnel must be demolished.

The designers' role in this part of the project will be to integrate this partial covering with the public place's design; the objective is to minimize the visual, physical and sound impact of the expressway exit's presence.

The currently proposed covering is in two sections. A first section is horizontal, level with the surrounding terrain, and covering a 40 m length of the ramp. The second section is on an incline following the exit slope, above it. The topography proposed for the new public place must therefore take this incline into account. Any further covering of the ramp and any new covering option proposed by the competitors will be subject to the MTMDET's standards, i.e., 5.1 m of clearance and a maximum slope of 6%. The preliminary reference plan is available in Appendix M (in French). The technical solutions for the covering have not yet been determined. Finalists' proposals may, to a certain point, influence the plans and specifications of the ramp covering, which will be underway starting in October 2017. Note that the covering work, including all changes to the expressway exit, as well as the demolition of the pedestrian tunnel, are not within the scope of the work to be proposed by competitors or finalists.

Load capacity

The load capacity of the proposed Saint-Antoine ramp covering is as follows:

Dead loads:

- embankment: 15 kPa;
- lamps and passive protection: 1 kPa.

Live loads:

- Scenario 1: CL3-625 truck + 4 kPa;
- Scenario 2: 12 kPa + additional snow load of 2.48 kPa.

6.3 LOAD CAPACITY OF EXISTING WORKS

The presence of existing underground and above-ground works means there are constraints on surface loads (see the summary of load capacities in appendices G, I and L, in French). The new public place's design must take these restrictions into account.

Analyses and studies have been carried out to evaluate or define the load-bearing capacity of some of these works, which will influence the potential for spatial planning of the site. However, other studies will need to be carried out as needed by the winner, and validated by the STM and the MTMDET based on the proposed spatial planning concept (e.g., location of overpass pillars near the covering structure, alternative options for vehicle access).

Rue Sanguinet bridge

A preliminary report provided by the MTMDET indicates that the Sanguinet bridge slab, in its current state, can support the loads of a CL-625 truck (30 tonnes) in the longitudinal direction only, but not transversally. Any new design could therefore bear a non-balanced (and non-mobile) live load of 12 kPa and a dead load of 0 kPa. If a live load below 12 kPa is applied, an additional dead load could be added. Since these data are drawn from a preliminary report, additional checks will be required to confirm the feasibility of including the designers' proposed designs.

STM métro tunnel and CRCHUM pedestrian tunnel

A study of load-bearing capacity (Appendix L, in French) carried out in the area of the métro station's main entrance has concluded that the upper slabs of the STM métro tunnel and the CRCHUM pedestrian tunnel in front of the métro station entrance will be safely able to support the following live loads:

- A type CL3-625 vehicle (30 tonnes) as described in CAN/CSA Standard S6-06. This load is equivalent to that of the design for the MTMDET slab covering the Ville-Marie Expressway;
- A 20-tonne fire truck with a load distribution according to axle positions determined with the help of the SIM;
- 4.8 kN/m^2: pedestrian load per Article 4.1.5.3 of the National Building Code of Canada 2010;
- 12 kN/m^2: special distributed load per Article 4.1.5.3 of the CNB 2010. This load is equivalent to that of the design for the Ville-Marie Expressway covering slab (project developed by the MTMDET).

The methodology used in the report could be adapted to evaluate the load-bearing capacity of the underground structures west of the station, since it has not been confirmed. In addition to the load capacities presented, the place's design must respect the NCC Métro 2013 design standards and criteria. This guide can be provided to finalists as needed.

Champ-de-Mars métro station

All designs around the edges of the métro station must respect the NCC Métro 2013 design standards and criteria, as prescribed by the STM. A major issue concerns the protection of the glassworks by Marcelle Ferron.

6.4 WATER RETENTION AND DRAINAGE

All water present on the covering slab will course toward the MTMDET apron drains along Axis 3 of the new structure (northern border of the structure). These drains direct rainwater to the drainage network of the Ville-Marie Expressway. The runoff flow of the designs proposed for the slab must in all cases be equal to or lesser than the current flow into the MTMDET network via

the expressway structures that currently occupy this same surface. Drainage of zones outside the limits of the covering slab must be via infiltration when conditions permit, or toward the existing municipal network.

The new public place project will have effects on drainage in the area, since the slab surface will generate additional rainwater compared with current conditions. The site's resilience is of great importance, especially considering the presence of critical infrastructures such as the Champ-de-Mars métro station and tunnel, the CRCHUM pedestrian tunnel, and the Ville-Marie Expressway, which in many places are lower than some parts of the new covering slab and Avenue Viger.

6.5 NEW MTMDET MECHANICAL WORKS AND EXIT STRUCTURE

A surface access structure will be erected by the MTMDET north-west of the covering. This structure will act as an emergency exit as well as contain mechanical and electrical equipment related to the operation of the expressway tunnel, whose implementation, architecture and volumes have already been determined along with design constraints (see Appendix G, in French).

The structure is made up of two floors, including one basement (level A-720). The above-ground floor contains an emergency exit and an electrical room. The structure is located between the métro tunnel and the expressway tunnel in a very narrow space so as not to cause any impact on either work. The outdoor portion of the structure is about 4 m high and 15 m long. This construction will have a considerable impact on some of the views toward the Cité administrative, mainly from Place Marie-Josèphe-Angélique and Avenue Viger. As well, a parking space and a space for an emergency generator must be included in the place's final design, for the needs of the mechanical works and exit structure.

This structure must be included in the design concept for the future public space. To this end, competitors must consider solutions to visually lighten the structure and integrate it into the place's landscape. Solutions regarding topography, materials and nearby usages may be proposed, while respecting the constraints related to the structure. The goal is to conceal the technical features of the structure and so enhance the place's landscape. Additional analyses and studies to evaluate the potential for changes to components of the structure (e.g., volumes, materials) must be carried out by the winner jointly with the MTMDET.

6.6 NEW PEDESTRIAN OVERPASS

The new pedestrian overpass to be designed as part of the new public place project may under no circumstances rest on the Ville-Marie Expressway covering slab, whose load-bearing capacity is limited. A minimum clearance of 5.3 m must be respected above municipal roads and the expressway exit (Rue Saint-Antoine and Saint-Antoine ramp). The desired minimum width is 4 m, to ensure smooth traffic. Excerpts from the feasibility study for overpass implementation options are available for illustrative purposes in Appendix H, in French.

6.7 VEHICLE TRAFFIC

To ensure emergency vehicle access required by the SIM and to facilitate maintenance vehicle access, the MTMDET has included two transition slabs between the covering slab and the adjacent spaces (see Appendix G, in French). An initial transition slab is planned for the north-west corner of the slab, just west of the MTMDET mechanical works and exit structure. The second transition slab will be located farther east, near the main entrance to the métro station. Lastly, bollards will be anchored in the slab along Avenue de l'Hôtel-de-Ville to prevent vehicles from accessing the slab. The bollards can, however, be removed in the new design and replaced by

options that are better integrated into the overall concept, while preserving the objective of preventing vehicles from accessing the slab at places other than the transition slabs.

The emergency vehicle route to the new public place must respect the following additional conditions:

- provide a travellable pathway at least 4 m wide. No temporary installations (e.g., stage, kiosk, street food truck) are permitted inside these space limits;
- permit one-way traffic to access, circulate and exit the site; this route must include an east-west path linking the two transition slabs identified on the MTMDET plan; and provide a travellable surface designed to Standard CAN CSA-S6, with sufficient load-bearing capacity for the loads created by the E-One 200 Autopump emergency vehicle (20 tonnes) and the CL3-625 truck (30 tonnes).

6.8 PUBLIC INFRASTRUCTURES

A plan providing schematic indications for the location of existing public utility infrastructures (sewers, water main, electricity) is provided in Appendix G (in French). These services are expected to remain in place and accessible. The project must include all installation, hook-ups, relocation, abandonment and protection of public utilities required for the site's usages or affected by the project's activities. A detailed plan of public infrastructures will be available for the finalists.

In addition, two dry hydrants and two wet hydrants are planned for the north part of the MTMDET covering slab. They must be integrated into the place's design while remaining visible and accessible to emergency services using public streets (see the vehicle traffic plan in Appendix G, in French).

6.9 REGULATORY CONDITIONS AND AUTHORIZATIONS

In the Montréal Master Plan, the site under study is located in a "mixed sector." This sector authorizes a diversity of usages, including residential, commercial and institutional. However, Place Marie-Josèphe-Angélique, the area in front of the métro station access structure, and the pedestrian overpass are designated as "parks and green spaces." As such, the expected usages must remain complementary with the park and be qualifiable as local-scale community equipment. The maximum authorized height is 45 m and the construction density is 6.

In the *Urban planning by-law for Ville-Marie borough* (by-law 01-282), the areas adjacent to the métro station and Champ-de-Mars are located in the areas under usage category E.1, "parks and public spaces," while the Ville-Marie Expressway trench and the former parking lots bordering Rue Saint-Antoine are located in an area under usage category M.7C, "mixed zone authorizing businesses and medium-intensity services." The maximum authorized height is 16 m and the construction density is 6.

As well, since the new pedestrian overpass reaches Champ-de-Mars, its southern anchor point is located within the Montréal Heritage Site. This element must therefore be authorized by the MCC.

6.10 ARCHEOLOGY

The project site is located in an area with high archeological potential. Archeological studies and inventories will be conducted leading up to the construction work on the public place. The results of this work may make it possible to showcase the archeological heritage as part of the project, and require that protection measures be developed for these resources if needed.

6.11 SOIL CHARACTERIZATION AND CONTAMINATION

The project site is located on soil that is potentially contaminated. Soil characterization studies and decontamination work, if needed, will be carried out leading up to the construction work on the public place.

7. IMPLEMENTATION OBJECTIVES

7.1 PROJECT COSTS

The project's budget, excluding taxes, is thirty-nine million eight hundred and seventy thousand dollars ($39,870,000) and includes:

- The construction budget for the public place and the new pedestrian overpass, in the amount of thirty-four million eighty thousand dollars ($34,080,000);
- Professional service fees for design and worksite surveillance in the amount of five million seven hundred and ninety thousand dollars ($5,790,000).

7.2 SUMMARY PROJECT TIMETABLE

Surrounding works	
Covering of Ville-Marie Expressway (18 months)	Spring 2016–November 2017
Temporary construction on the slab by the City (24 months)	Spring 2018–Spring 2020
Preliminary and final plans and specifications, contract and encroachment permits to cover the Saint-Antoine ramp (22 months)	October 2017–July 2019
Covering of the Saint-Antoine ramp (24 months)	July 2019–July 2021
Works following the competition	
Awarding of the contract to the competition winner	June 2018
Detailed design and plans and specifications for the new place (15 months)	June 2018–September 2019
Contract and encroachment permits for the new place (6 months)	October 2019–March 2020
Construction for the new public place (24 months)	April 2020–April 2022