2.5

2.5

High-quality architecture and urban landscapes

Montréal's unique urban landscape stems not only from Mount Royal and the St. Lawrence River but also from elements related to architecture and urban design. The quality of its architecture, both old and new, the design of its streets and other public spaces and even the various street patterns are all enduring witnesses to the City's history and cultural vitality. Montréal nurtures a special art of living in the city, expressed in the serendipity of its architecture, gardens and public spaces. The City's character is also shaped by the seasons, which colour in different hues the various ways of occupying the urban environment.

A primary goal of the Master Plan is a high-quality urban environment. Apart from enhancing the City's overall image, quality urban design and architecture generally transcends passing styles and proves more durable, attractive and economical in the long term. Thus the Plan's orientations reflect the Ville de Montréal's focus on developing a culture of quality, excellence and creativity in urban design and architecture. In this regard, Montréal's urban landscape has definite qualities. Choices, however, must still be identified in the Master Plan to enhance the quality of living environments and contribute to the City's economic development.

This culture of quality must also show respect for the characteristics of Montréal's urban fabric, by reinforcing each borough's identity and continuously improving the urban landscape. Accordingly, each opportunity provided by the improvement of a street or public space or the construction of a building or component of transportation infrastructure must be considered as a means to enrich the cityscape.

The Ville de Montréal has identified the following four objectives to ensure the quality of the City's architecture and urban landscapes:

11 Enhance Mount Royal, the island character and other major features of the City's identity.

12 Promote quality architecture and consolidate the built environment in harmony with the surrounding character.

13 Upgrade the public realm through coherent design of streets and other public spaces.

14 Ensure the positive contribution of large transportation infrastructure to the urban landscape.

objective 11

Enhance Mount Royal, the island character and other major features of the City's identity

MOUNT ROYAL HISTORIC AND NATURAL DISTRICT

Mount Royal's dual status as a historic and natural district marks a first in Québec. This legal status confirms the Mountain's symbolic and historic importance in the collective memory of not only Montréal, but also Québec. Moreover, it acknowledges the conservation and improvement efforts made by Montrealers over several decades and leads to renewed protection of Mount Royal's historic, scenic and natural heritage.

Some parts of Mount Royal have been developed into parks and are public property, while others are occupied by cemeteries, high-level institutions (universities, hospitals and a pilgrimage site) and residential areas. Under the provisions of the Québec Loi sur les biens culturels (Cultural Property Act), any subdivision or parcelling of the land, any changes to the design, layout, purpose or use of a building, any alterations to its outer appearance or its partial or total demolition, as well as any signs or new construction require authorization from the Ministère de la Culture et Communications du Québec.

The predominance of Mount Royal and the Central Business District's (CBD) skyline are important symbols of Montréal. The territory's island character and the visual presence of the St. Lawrence and other rivers, canals and lakes surrounding the City also rank among the key features shaping its identity.

From the earliest days of European settlement, the City's island location generated a series of thoroughfares that follow a virtually uninterrupted course along the riverbanks. Today, this waterside roadway is not only scenic, but also historical, recreational, residential and rural, while encompassing the port and industrial activities.

In addition to Mount Royal's central position, Montréal's urban landscape is characterized by an extensive green network consisting of tree-lined streets, parks and green spaces.

Even today the urban landscape and general layout of Montréal's street pattern remain closely tied to the original pattern of côtes and montées established in the 17th and 18th centuries, as well as to the natural physical features of the landscape.

The City's gateways, including the bridges and their approaches, also provide unique opportunities for Montréal to assert its identity.

Montréal's urban landscape also reveals itself at night. The different uses of light – for utility, advertising or atmosphere – represent various ways of enriching the urban landscape and developing Montréal's nocturnal signature.

action 11.1

Preserve the character of Mount Royal and its predominance in the urban landscape

The lush greenness of Mount Royal, the emblematic figure of Montréal, lies at the heart of the City's history, territory and personality. Even beyond the boundaries of the Mount Royal historic and natural district, the Mountain includes heritage elements that require preservation and enhancement, such as its diverse geomorphological characteristics, its three-summit cluster located in the boroughs of Westmount, Outremont and Ville-Marie, the many institutions that are found at its perimeter and its adjacent areas.

Together with the CBD's skyscrapers, the Mountain is Montréal's dominant landmark. Towering over the City, it permits exceptional views of the surrounding urban environment and the St. Lawrence River beyond. The Mountain itself can be seen in broad vistas or framed views from locations all over the City, many of them busy public places (parks, belvederes, public plazas and commercial streets).

Mount Royal also functions as a green space whose scenic, ecological, recreational and tourism value are immeasurable to Montréal. A special place to make contact with nature, the Mountain is unfortunately hard to access for pedestrians and cyclists, despite its proximity to the Centre and many of the City's residential neighbourhoods.

The visual and physical relationships between the Mountain, the CBD, the surrounding urban area and the waterways all contribute to Montréal's rich and unique urban experience.

Implementation measures

- Limit construction on the slopes of Mount Royal and impose height restrictions to maintain the Mountain's pre-eminence in Montréal's skyline.

- Set appropriate height restrictions on the Mountain's south slope and concentrate the tallest buildings in the CBD in order to maintain the distinction between Mount Royal and the core of skyscrapers in the Centre. In keeping with established practice, no building may exceed the height of the Mountain's summit (232.5 metres above sea level).

- Protect and enhance the broad vistas and framed views **towards** and **from** the Mountain, especially those identified in the illustration entitled Broad Vistas and Framed Views of Interest. This will help to maintain the visual relationship between the Mountain, the river, other waterways and the adjacent urban environment.

- Enhance the broad vistas and framed views of interest through high-quality design of public spaces like the belvedere or the staircases giving access to the Mountain.

- Manage all interventions made on and around the Mountain taking into consideration the particularly rich heritage of this area's built form, topography, vegetation and archaeology (see Objective 15).

- Improve pedestrian and cyclist accessibility to Mount Royal through the design and maintenance of public access points, especially on its southern side and through the redesign of road infrastructure circling or crossing the Mountain.

- Update Mount Royal's Enhancement Plan in an integrated and concerted planning approach (see Chapter 4).

THE PREDOMINANCE OF MOUNT ROYAL

232,5 mètres maximum

000 niveau de la mer
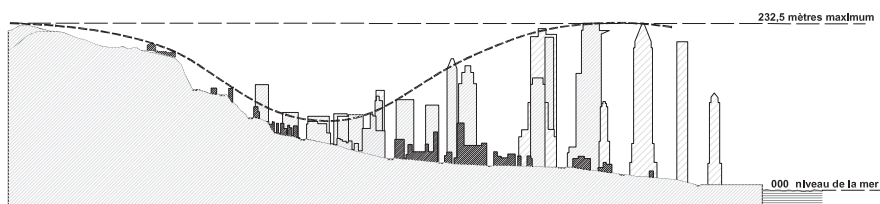
The importance of Mount Royal's silhouette and the distinctive skyline formed by the Mountain and downtown core of skyscrapers are fundamental characteristics of Montréal's urban landscape. They are protected by appropriate restrictions on height, particularly on the Mountain's south slope, as well as by concentrating the tallest buildings within the boundaries of the CBD.

BROAD VISTAS AND FRAMED VIEWS OF INTEREST

BROAD VISTAS :

A. Lookout at the Mount Royal Chalet
B. Pins Avenue, corner of Peel Street
C. Docteur-Penfield Avenue, corner of De La Montagne Street
D. Summit Park belvedere southward
E. Roslyn belvedere
F. St. Joseph's Oratory
G. Summit Park belvedere northward
H. Vincent-D'Indy corridor
I. Camillien-Houde Road northward
J. Camillien-Houde belvedere

BROAD VISTAS AND FRAMED VIEWS OF INTEREST

BROAD VISTAS :

A. Jacques-Cartier Bridge
B. Île Sainte-Hélène (Island Belvedere)
C. The Clocktower
D. Vauquelin Place
E. Belvedere at the tip of Cité-du-Havre Park
F. Peel Basin
G. Lachine Canal (Des Seigneurs Street)

FRAMED VIEWS :

1. University Street
2. McGill College Avenue
3. Mansfield Street
4. Metcalfe Street
5. McTavish Street
6. Peel Street
7. Stanley Street
8. Drummond Street
9. De la Montagne Street
10. Musée Avenue
11. Redpath Street
12. Simpson Street
13. Guy Street
14. Atwater Avenue
15. Greene Avenue
16. Monkland Avenue
17. Somerled Avenue
18. Queen-Mary Road

19. Côte-des-Neiges Road
20. Rockland Road
21. Dollard Boulevard
22. Outremont Avenue
23. Fairmount Street
24. Laurier Avenue
25. Saint-Joseph Boulevard
26. Villeneuve Street
27. Mont-Royal Avenue
28. Mont-Royal Avenue
    (Borough of Rosemont—La Petite-Patrie)
29. Marie-Anne Street
30. Rachel Street
31. Duluth Avenue

Not shown :
Sherbrooke Street East (Borough of
Mercier–Hochelaga-Maisonneuve)

action 11.2

Assert Montréal's island character and enhance its waterside roadway

The rivers and hundred-odd islands, islets and shallows composing the territory are another fundamental component of Montréal's urban landscape. The 270 kilometres of riverbanks give Montréal's quality of life a unique dimension that the City intends to preserve and enhance.

Thus, the City recognizes the historical value of the waterside roadway around the Island of Montréal and Île Bizard. It favours protecting and enhancing the following heritage and scenic components that contribute to its varied character:

- Old Montréal, old villages and buildings of heritage value as well as their associated archaeological vestiges (see Objective 15);

- Views of waterfronts, rivers and islands;

- Parks, woods and areas with a rural or agricultural character;

- Other significant features of the waterside roadway such as port and refinery operations, the industrial heritage of the Lachine Canal, the aqueduct canal, as well as some contemporary residential areas.

Extending to Île des Soeurs and Jean-Drapeau Park, the waterside roadway also forms a major recreational route connecting many of the natural and historic elements that are characteristic of Montréal's identity. The roadway is therefore an integral component of Montréal's Blue Network and of the riverbank and waterway enhancements described in Objective 16.

Implementation measures

- Control the siting and height of buildings along the waterside roadway with appropriate regulatory instruments that emphasize the following standards:
  - Respecting the architectural and landscape character of the different segments;
  - Maintaining visual access to the water from the waterside roadway, as well as from perpendicular thoroughfares that provide scenic views of the water.

- Improve the general image of the waterside roadway by:
  - Installing street furniture adapted to the specific character of the different segments, especially in terms of lighting;
  - Harmonizing road signage;
  - Burying overhead wires in areas of historical or scenic value in accordance with the Plan directeur d'élimination des fils et des poteaux (Wire and Pole Elimination Plan – see Objective 13).

MONTRÉAL'S BLUE NETWORK

To enhance Montréal's island character and enable residents to enjoy the presence of water, the City, in association with all its partners, particularly the Canadian and Québec governments, as well as the Communauté métropolitaine de Montréal, intends to continue developing the Blue Network encompassing the entire Montréal archipelago.

In particular, the project aims to improve the ease of use and protection of the riverbanks around Montréal as well as provide Montrealers with better access and a variety of activities. The project also involves improving the waterway network and the connections between existing waterside routes (bicycle, pedestrian and boating).

- Complete the waterside roadway connecting the Borough of Verdun to Old Montréal by designing a public waterfront corridor, following the relocation of the Bonaventure Expressway and its conversion to an urban boulevard (see Objective 3 and Chapter 4).

- Develop interpretive tools for the various components of the waterside roadway, such as observation sites and signs for features of interest such as the Lachine Rapids or certain old villages.

- Complete the bikeway network including the Montréal Island perimeter bikeway, and extend it to Île des Soeurs and Île Bizard (see Objective 3).

- Ensure the harmonious integration of design elements, facilities and enhancement activities of the waterside roadway with the neighbouring residential environments.

- Maximize physical and visual contact with water by designing public riverbanks accordingly and initiating a program for acquiring private waterfront properties for conversion into parks or naturalization.

- Protect and enhance waterfront parks and green spaces.

- Continue developing the Blue Network in cooperation with various partners, particularly the federal and Québec governments and the Communauté métropolitaine de Montréal.

- Favour the protection and enhancement of the numerous islands, islets and shallows of the Montréal archipelago by integrating them into the Blue Network and participating in regional initiatives in collaboration with municipalities, regional county municipalities and concerned organizations.

- Design public waterfronts in order to make them accessible for swimming when water quality permits and install nautical facilities in areas that do not yet have them (docks and boat ramps).

ILLUSTRATION 2.5.1   THE WATERSIDE ROADWAY

Physical and visual access to the St. Lawrence River, Rivière des Prairies and other waterways is, more than ever, a major unifying feature of Montréal. By identifying the waterside roadway, the City seeks to protect and enhance all its components, such as old villages, views, natural environments, waterfront green spaces and the bikeway network, as well as other elements that contribute to the character of the roadway.

Waterside Roadway
Old Village or Old Montreal
Riverside Park or Green Space

action 11.3

Preserve and improve Montréal's
green network

The trees planted on streets and private properties, along with the approximately 900 parks covering almost 47 km^2, constitute a true network within the City (see Map 2.5.1).

Trees are the dominant natural feature of public and private spaces and have major environmental and social value. Still, Montréal's urban forest, consisting mainly of the trees on public property, presently faces a variety of challenges affecting its renewal, survival and development. These threaten the quality and future of Montréal's forest heritage.

The species of trees on City territory are not very diverse, making them more vulnerable to disease. In some areas, most of the trees are mature, putting their survival at risk. Thus, it is important for the City to pay closer attention to the species used, their growing conditions and their visual impact.

The Plan reinforces the importance of parks and green spaces as special places enabling relaxation, leisure and contact with nature. It also underlines the major contributions of nature parks, metropolitan parks and large urban parks to the quality of Montréal's living environments through the projet de Réseau des grands parcs (Major Parks Network project).

THE MAJOR PARKS NETWORK

The projet de Réseau des grands parcs (Major Parks Network project), resulting from the Montréal Summit, aims to create physical connections between the large parks using bikeways, public transportation routes and directional road signs.

However, the project is more extensive and also seeks to:

- Define the main vocation of each large park and its different components;

- Assess the natural areas located within parks and green spaces and designate the most significant ones as protected areas subject to environmental management, in keeping with the Politique de protection et de mise en valeur des milieux naturels (Policy respecting the Protection and Enhancement of the Natural Environment);

- Develop an integrated management approach applicable to all of the City's large parks that takes environmental sensitivity and fragility into consideration;

- Improve accessibility so that residents can benefit from existing infrastructure;

- Ensure a better integration of the network into the urban fabric.

The Master Plan also recognizes the importance of protecting private green spaces for their exceptional contribution to the ensemble of Montréal's green network. In addition to large public green spaces, Map 2.5.1 identifies some of Montréal's largest cemeteries, whose scenic, historic or heritage character must be preserved. It also earmarks certain golf courses for preservation, due either to their contribution to the overall character of an area, their heritage value, or to the fact that they represent the only type of land use possible due to specific restrictions, as is the case for the Club de golf de l'Île de Montréal. The continuity of these green spaces is ensured by the land use designations presented in Section 3.1.

Trees planted in front or back yards or along alleys, as well as gardens planted on the grounds of institutions, all contribute significantly to the greening of the City's living environments. The Ville de Montréal intends to protect trees, particularly those planted in front yards or aligned in rows. The City also favours the greening of its residential areas and will give special importance to tree planting when considering the design of public spaces.

Implementation measures

- Protect and improve the parks and green spaces shown in Map 2.5.1.
- Develop and implement the Tree Policy and the Major Parks Network project.
- Ensure the greening of living environments through:
  - An increase in the planting of trees on public and private land, particularly in areas lacking in this regard and those that are extensively paved;
  - Regulatory measures favouring green spaces and the planting of trees as part of new real estate developments, in front yards, backyards, courtyards, rooftops, etc.;
  - Support for green alley initiatives.
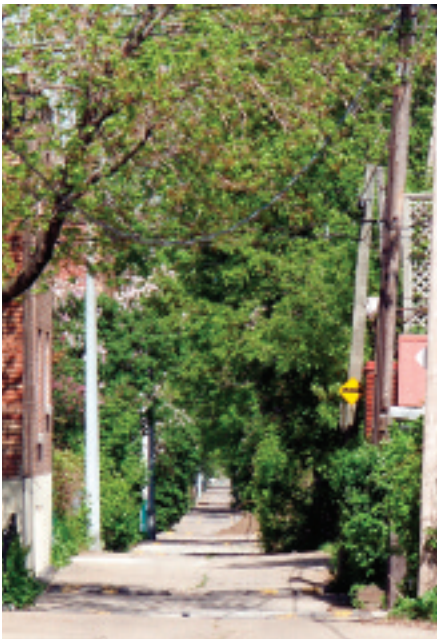
Trees are environmental purifiers. They help reduce atmospheric carbon levels and retain rainwater. A city tree captures an average of 100 kg of dust a year.

By emitting water vapour, trees also help freshen the air, while their shade helps relieve the heat.

Well-located trees and shrubs can even serve as windbreaks and reduce heating and air-conditioning costs by 20% to 25%.

- Develop partnerships between the City and Montréal's school boards to facilitate the greening of schoolyards and the creation of new school-parks.
- Develop agreements with Montréal's large institutions and cemeteries ensuring that they preserve the landscape elements of their sites and enable public access to their green spaces.
- Consolidate and harmonize tree protection and tree planting measures, specifically so as to:
  - Regulate tree cutting;
  - Ensure maximum conservation of existing trees in the layout of new buildings;
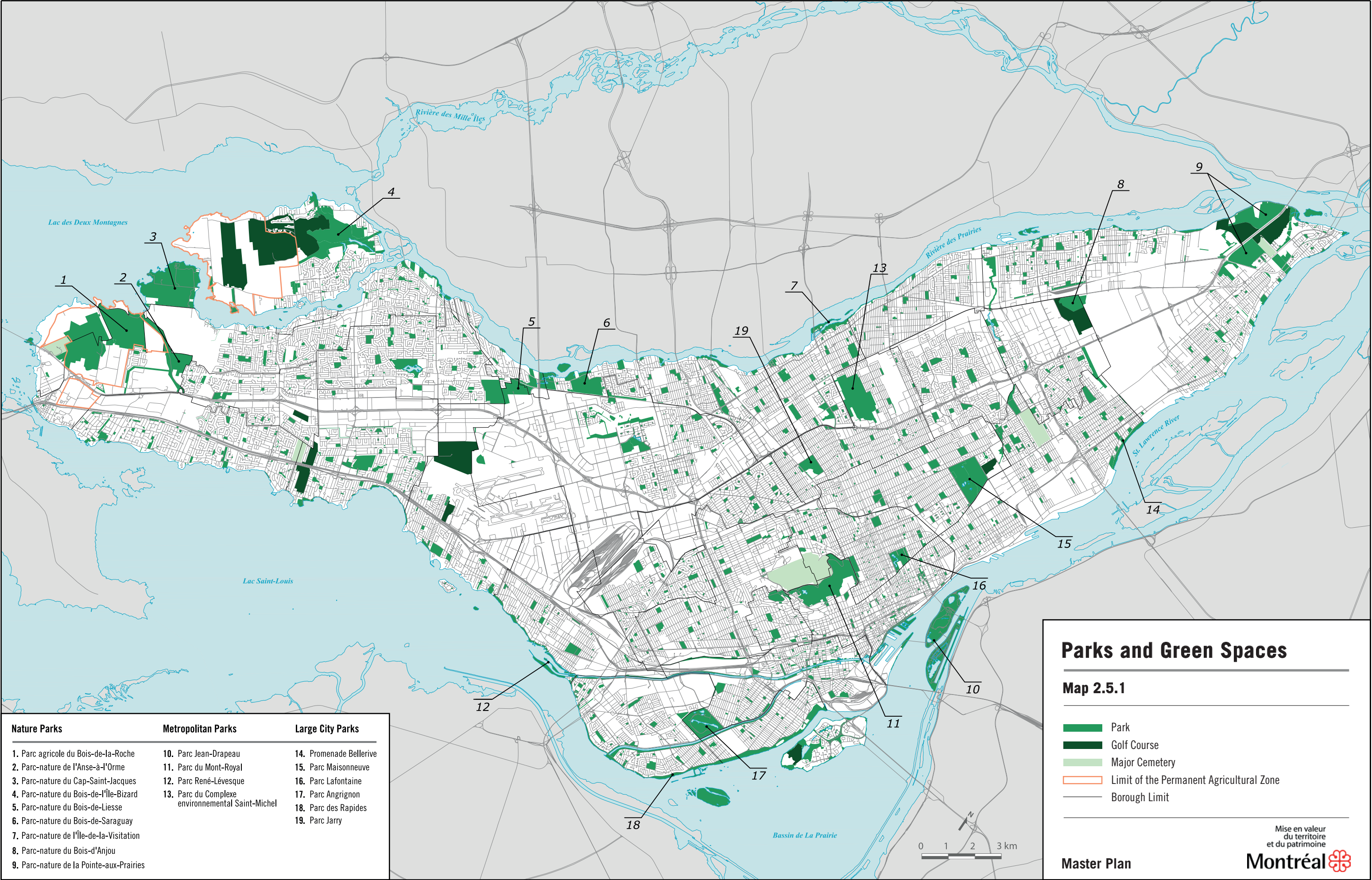 - Protect trees and their roots during street and building work.

THE TREE POLICY

The Ville de Montréal has started developing its Politique de l'arbre (Tree Policy), which it plans to adopt in 2005. The Policy aims to facilitate decision-making on trees and their care throughout the territory, while taking into consideration their social and environmental value. The Policy also recommends that boroughs and municipal departments coordinate their work methods and compliance with the laws and regulations governing the presence of trees, while increasing citizen participation.

Under the Policy, decisions and actions related to Montréal's forest heritage must seek to:

- Ensure the development and survival of trees and Montréal's urban forest;
- Develop a borough-based greening plan covering Montréal's entire territory;
- Foster coordination among all public- and private-sector players whose decisions have an impact on urban trees;
- Optimize use of the human and financial resources assigned to urban forest management from the standpoint of sustainable development.

The following are the main objectives of the Tree Policy:

- Encourage Montrealers to better appreciate and adopt their City's trees and urban forests;
- Increase the number and diversify the species of trees located in the City's public domain;
- Promote and foster the conservation of existing trees through alternative urban development planning, control of tree-cutting and adequate protection for street-side trees exposed to damage;
- Protect woodlots of interest (rare, mature, over one hundred years old or of local interest);
- Catalogue and preserve remarkable trees throughout the Montréal territory;
- In accordance with the greening plan, favour the replacement of trees that have been cut down.

Lac des Deux Montagnes

Rivière des Mille Îles

Rivière des Prairies

St. Lawrence River

Lac Saint-Louis

Bassin de La Prairie

Parks and Green Spaces

Map 2.5.1

- ■ Park
- ■ Golf Course
- ■ Major Cemetery
- ▭ Limit of the Permanent Agricultural Zone
- — Borough Limit

Nature Parks

1. Parc agricole du Bois-de-la-Roche
2. Parc-nature de l'Anse-à-l'Orme
3. Parc-nature du Cap-Saint-Jacques
4. Parc-nature du Bois-de-l'Île-Bizard
5. Parc-nature du Bois-de-Liesse
6. Parc-nature du Bois-de-Saraguay
7. Parc-nature de l'Île-de-la-Visitation
8. Parc-nature du Bois-d'Anjou
9. Parc-nature de la Pointe-aux-Prairies

Metropolitan Parks

10. Parc Jean-Drapeau
11. Parc du Mont-Royal
12. Parc René-Lévesque
13. Parc du Complexe environnemental Saint-Michel

Large City Parks

14. Promenade Bellerive
15. Parc Maisonneuve
16. Parc Lafontaine
17. Parc Angrignon
18. Parc des Rapides
19. Parc Jarry

N

0   1   2   3 km

Master Plan

Mise en valeur du territoire et du patrimoine

Montréal

action 11.4

Preserve and enhance rural character and agricultural activities in certain areas of the West Island

Montréal still has some agricultural land, the last holdovers of farming on the Island. These farmlands give the western section of the Borough of Pierrefonds-Senneville and certain areas of the Borough of L'Île-Bizard–Sainte-Geneviève–Sainte-Anne-de-Bellevue a rural character. The permanent agricultural zone decreed by the Québec government covers some 2,000 hectares, or 4% of the total area of Montréal. The Ville de Montréal intends to maintain this permanent agricultural zone within its current boundaries.

A substantial portion of the agricultural zone is occupied by Bois-de-la-Roche agricultural park, the Morgan Arboretum, the St. Lawrence Valley Ecomuseum, the experimental farm on McGill University's MacDonald Campus, part of the L'Anse-à-l'Orme nature park, as well as golf courses. These sites represent an important centre of ecological, agricultural and recreational tourism.

Agricultural operations, however, remain marginal due to the farm community's lack of vitality: fields for rent, a lack of succession, lack of investment, etc. The City therefore plans to create an environment conducive to the development of farm activities and operations and favour organic agriculture while controlling non-agricultural uses in accordance with the policies of the Québec government concerning agricultural land and activities.

Implementation measures

- Maintain the current boundaries of the permanent agricultural zone within Montréal's territory as shown in Map 2.5.1.

- Plan the residential areas to be constructed that abut the City's permanent agricultural zone (see Map 1.1) in such a way that their uses do not come into conflict.

- Conduct a study of the agricultural zone within Montréal's territory to determine its character and potential.

- Improve the tourist appeal of agricultural areas, notably by creating conditions conducive to the discovery of rural scenery and supporting local initiatives to raise awareness of, enhance and interpret the agricultural heritage.

- Develop the Bois-de-la-Roche agricultural park.

- Prepare a strategic plan for improving agricultural activities in cooperation with the agricultural advisory committee, the Communauté métropolitaine de Montréal and the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec.

action 11.5

Preserve the specific features of Montréal's urban framework

The routes of early European settlement and natural features of the territory were the first components of Montréal's urban framework. Over the years, these routes have been transformed, accommodating the buildings that make up Montréal's current urban fabric.

The Master Plan recognizes the importance of preserving the significant features of Montréal's urban fabric, such as the orthogonal grid and alleys of the central boroughs or unique street patterns like those found in the Borough of Mont-Royal.

Certain characteristics that help maintain the coherence of the City's built environment with respect to its different street grids must also be maintained. For example, many of Montréal's central boroughs are characterized by a streetscape showing consistent building height, alignment and site coverage. These characteristics must be respected by new construction projects in these areas.

While respect for these characteristics is of great importance, urban sustainability and energy efficiency are also major urban planning concerns. In the areas to be constructed, the Master Plan favours planning street grids and siting buildings with an orientation that provides maximum sunlight and protection against the prevailing winds. These can both contribute considerably to energy efficiency in the winter months.

Implementation measure

- When assessing the design of public spaces and building construction projects, ensure that the unique features of Montréal's urban fabric, such as the orientation and structure of streets, the shape of blocks and the characteristics of buildings, are respected. These actions should also follow the Plan's policies on pedestrian travel, public transit use and the optimal use of resources (see Objectives 3, 13 and 17).

ILLUSTRATION 2.5.2   THE SETTLEMENT ROUTES

The côtes and montées established in the 17th and 18th centuries were the first thoroughfares in Montréal. Some street grids and other significant features of Montréal's urban fabric represent the continued existence of these settlement routes and warrant special attention. Accordingly, the areas of heritage value identified in Objective 15 specifically include buildings and settings that contribute to the historic nature of certain segments of the settlement routes.

action 11.6

Highlight the gateways to Montréal's territory

Montréal's territory is accessed by fifteen road bridges and six railway bridges. The need to cross waterways provides an opportunity to express the City's personality through appropriate treatment of its gateways. Moreover, the Master Plan recognizes the importance of designing all of the City's gateways in a distinctive manner while giving consideration to the following:

- Ensuring the quality of buildings located near the City gateways and the integration of commercial signage;
- Maintaining views from the bridges and integrating billboards into the urban landscape;
- Enhancing the vegetation and riverbanks;
- Lighting of bridges and other structures;
- Integrating road signs and infrastructure into the urban setting.

In addition to bridges, the other City gateways that handle a large share of Montréal's foreign visitors also require special attention: Montréal – Pierre Elliott Trudeau International Airport, Central Station and the port.

Some City gateways with specific redevelopment or improvement issues will be the focus of detailed planning whose guidelines are described in Chapter 4.

Implementation measures

- Ensure special care of the City gateways in the course of public works projects.

- Implement appropriate regulatory guidelines to give the City's gateways an overall image of quality in keeping with the above considerations.

- Design and implement a project to improve the City's gateways in association with the Ministère des Transports du Québec and the Federal Bridge Corporation.

ILLUSTRATION 2.5.3   THE CITY'S GATEWAYS

The Master Plan recognizes the importance of ensuring a distinctive design and treatment of the City's gateways.

Road Gateway
Rail Gateway
Shared Gateway

action 11.7

Highlight Montréal's nightscape

Montréal's nocturnal urban landscape hides many treasures worth enhancing and many areas where the lighting should be reviewed because of deficient or excess lighting. The expression of Montréal's identity is also achieved through numerous different lighting schemes, whether it be for the utilitarian lighting of the road network and various urban activities, advertisements that glow at night, the lighting of monuments and buildings or ambiance lighting.

The uncontrolled increase in urban lighting has generated a growing problem of light pollution. This recently-recognized source of pollution entails wasteful and costly overconsumption of energy and an unwanted intrusion of light in living environments. Moreover, it effectively veils the night sky, which makes astronomy and stargazing very difficult even well beyond the metropolitan region.

Integrated planning is therefore required to harmonize the functional, safety and aesthetic concerns associated with urban lighting, while ensuring the quality of living environments and reducing power consumption.

Better use of light will also help the City and its boroughs express an evocative night signature, both unifying and distinctive, which will ensure:

- The enhancement of buildings and sites of architectural, historical, or natural interest;
- The highlighting of important buildings and facilities;
- The creation of distinctive atmosphere in keeping with the local surroundings;
- The safety of the public realm through adequate lighting;
- Better guidance for users of the road network and public spaces: drivers or pedestrians, residents or tourists.

In this regard, the recent implementation of the Plan lumière du Vieux-Montréal (Old Montréal Lighting Plan) is an eloquent example of architectural highlighting and of a functional street lighting review that can be extended to other areas of the City.

Implementation measures

- Develop and implement the Plan lumière de Montréal (Montréal Lighting Plan) by defining the overall lighting concept and goals as well as pilot lighting projects on public property or in partnership with the private sector.

- Ensure an appropriate regulatory framework for exterior lighting, targeting lighting levels, lighting devices, light dispersion and the time periods of lighting, particularly in commercial, industrial and institutional activity areas.

- Develop an urban lighting guide that sets general principles, design criteria and lighting standards aimed at reducing light pollution, harmonizing certain lighting practices and facilitating interventions in public lighting with respect to the individual character of the City's boroughs.

objective

12

Promote quality architecture and consolidate the built environment in harmony with the surrounding character

Montréal is characterized by a rich variety of built environments. The quality of their architectural and urban characteristics, such as building style and shape, building siting and materials, must be preserved and enhanced. Some buildings and settings also have heritage value (see Objective 15).

However, the harmony of the built environment can be undermined by vacant or underused land. Some areas are attracting a growing number of medium- and large-sized stores whose design raises issues of architectural and urban integration. The design and development of these sites must promote higher-quality architecture and ensure that new buildings reinforce the cohesiveness of their surroundings.

Architectural quality also guarantees the human scale of the City, since the character of streets and other public spaces is closely tied to the buildings that frame them. Thus architectural quality must be achieved through buildings whose style, scale and relationship with the street contribute to the comfort of pedestrians and the atmosphere of public spaces.

Finally, the notion of architectural quality must also extend to techniques for constructing, operating and maintaining innovative buildings that are healthier for their users and more respectful of the environment.

action 12.1

Promote quality architecture that is ecologically sound and respectful of Montréal's character

Architectural quality lies in an ability to reflect the City's culture and character. It also results from emphasizing excellence and creativity, not only at the design stage but throughout project implementation. From the standpoint of sustainable development, architectural quality also means innovative construction methods that favour environmentally friendly materials and the optimal use of resources.

The Ville de Montréal intends to play a leading role in architectural quality, both through the example of its real estate assets and the review of private projects. In response to Montréal's changing commercial framework and to strike a better balance of commercial components and shapes, the City also intends to provide architectural and urban guidelines for the insertion of medium- and large-sized commercial projects.

In keeping with the architectural and urban variety of the boroughs and complementing the preservation of heritage buildings described in Objective 15, the Master Plan identifies principles for the built environment that aim to:

- Preserve the City's human scale;
- Preserve Montréal's unique built form (see Objective 11) and avoid projects that do not respect the dominant typology of the neighbourhood;
- Enrich the urban landscape by paying special attention to the treatment of buildings that stand out or serve as a landmark because of their location or height relative to the surrounding built form.

TOWARDS A MORE ENVIRONMENTALLY-SENSITIVE ARCHITECTURE

Practiced for decades in Europe, ecological architecture continues to grow in popularity in North America. In conjunction with its goals of sustainable urban development and optimal resource management, the Master Plan recognizes the importance of environmentally-sensitive architectural practices as effective methods of supporting a healthier urban environment.

A more environmentally-sensitive architecture relies on consideration of the environment during the conception of the project, when certain strategic decisions are made. Six elements are particularly crucial in improving a project's environmental performance:

- Site choice;
- Design process and innovation;
- Choice of materials and resources used;
- Energy consumption and external air quality;
- Interior air quality;
- Efficient water management.

For each of these elements, a number of choices can be made. For example, improving energy efficiency can be achieved through the use of low-consumption appliances; solar, wind or geothermal energy, a green roof or simply through better insulation.

With so many options, it is important that the solutions chosen do not negatively affect other planning considerations, such as the integrity of heritage buildings or areas.

The practice of ecological architecture is governed by certain norms, performance standards which set different goals for different types of buildings. For instance, NovoClimat deals with residential buildings, while C-2000 applies to non-residential structures. Financial incentives for the use of environmentally-sensitive standards are also available from the Canadian government.

The LEED Standard (Leadership in Energy and Environmental Design), developed by the United States Green Building Council, has set the most stringent requirements to date for measuring buildings in terms of their ecological soundness and energy efficiency. The Canada Green Building Council has recently adapted it for use with Canadian and Québec building codes.

BUILDING GREEN ROOFS

Green roofs have been used for centuries worldwide to help insulate buildings against the elements. As part of the emergence of a culture more sympathetic to environmental protection, green roofs have grown in popularity due to their numerous advantages:

- Improved energy efficiency of buildings linked to more effective insulation;
- Reduction of the heat island effect (see Objective 17);
- Increased soundproofing;
- Rainwater retention and the reduction of flows to drainage networks;
- Filtration of air and rainwater by plants and the substrate;
- Possible use as green spaces for relaxation or urban agriculture.

Green roofs consist of layers of substrate, on which vegetation grows. Extensive green roofs are characterized by their relative lightness, a thin layer of substrate and good durability. Intensive green roofs make use of a drainage and irrigation system and involve a thick layer of substrate. They can support a larger variety of plants, shrubs and trees and can withstand frequent use by the building's inhabitants.

While green roofs are an effective innovation that is well adapted to the needs of Québec's climate, there are certain constraints to their installation on existing residential buildings, most notably the load-bearing capacity of their structures. It is also important that the integrity of heritage buildings not be compromised.

Implementation Measures

- Support the work of planning advisory committees and call upon the Comité d'architecture et d'urbanisme (Architectural and Planning Advisory Committee) to review projects likely to have a significant effect on Montréal's urban landscape, such as major public and private projects, especially those in the Centre (see Objective 7).

- Provide the City with mechanisms for ensuring architectural quality, particularly for municipal construction projects: urban design guidelines, an architectural competition policy, awards for excellence, etc.

- Ensure that all municipal buildings and all development projects constructed in partnership with the City meet performance standards for environmental sensitivity and energy efficiency during their construction, operation and maintenance.

- Develop and implement incentives to encourage the integration of energy-efficient methods and environmentally-sensitive architectural innovations, such as green roofs, in new construction or renovation projects.

- Apply regulatory controls to review medium- and large-sized commercial projects in order to control their architectural quality and urban integration.

- Oversee the insertion of new buildings in established areas with appropriate regulatory instruments that will take into consideration the dominant characteristics of the existing built environment, for example:
  - Building alignment, setting and lateral setbacks;
  - Typology and level of building entrances;
  - Proportions and location of openings (doors and windows);
  - Typical architectonic or volumetric elements such as cladding materials, balconies, cornices, stairs, the shape of roofs and the modulation of facades.

- Submit buildings that stand out in the urban landscape to an architectural evaluation process. For example, this would include tall buildings, those located at intersections or those terminating a street view.

- Establish building densities and layout rules that adhere to the character of established areas and favour a densification of the areas to be transformed, especially those located near public transportation corridors.

- Control building heights in accordance with the following criteria:
  - Harmonization of heights along each segment of a street, on both sides of the same street, around public spaces and at the four corners of an intersection;
  - Taller buildings along main thoroughfares;
  - Compliance with prevailing heights in areas of historical interest and along the waterside roadway (see Objectives 11 and 15).

- Control the installation of signs, billboards, antennas and mechanical equipment so as to limit their visual impact.

TALL BUILDINGS

Coupled with Mount Royal, tall buildings help define Montréal's unique silhouette. Taken individually, these buildings, whose heights distinguish them from their surroundings, are landmarks in the City and testimony to its economic and cultural dynamism.

While tall buildings are traditionally associated with the CBD, they have now spread to many of the City's boroughs. Because these buildings have a major impact on the urban landscape overall as well as in their immediate surroundings, the City intends to pay special attention to their impact on the urban fabric.

The architecture of these buildings must be of the highest possible quality, from the materials used on their facades to their roofs and visible mechanical systems. Similarly, tall buildings must have a shape and volume that optimizes their integration with their surroundings and respects Montréal's urban silhouette. Finally, the framed vistas and broad views of Mount Royal, as well as those enjoyed from it, must not be compromised by new structures.

To ensure pedestrian comfort, particularly in public areas, the height, bulk and massing of buildings must be properly designed to prevent adverse microclimatic effects related to sunlight and wind.

In terms of urban integration, tall buildings must respect and reinforce the character of the neighbourhood in which they stand, particularly in areas of significant heritage value, along the waterside roadway and in proximity to natural areas. They must also respond well to neighbouring living environments, the street and nearby public spaces.

THE TREATMENT OF COMMERCIAL STREETS

Commercial streets, as well as shopping areas of medium- and large-sized stores, are essential components of Montréal's living environments. New buildings and landscaping, both public and private, must serve to create a convivial environment for all users in compliance with the following principles:

- Improve the urban landscape and the street wall presented by shops, shopping malls and superstores by encouraging building construction along public thoroughfares, setting building heights according to street size and limiting the number and size of driveways.

- Ensure the harmonious insertion of new buildings, particularly on traditional shopping streets, to reinforce the following characteristics:
  - Building continuity and alignment;
  - Rhythm of street-level openings and type of entrances;
  - Prevailing facade materials.

- Promote the liveliness of commercial streets by maximizing the interaction of buildings with the street, notably by multiplying openings and direct access from the sidewalk, avoiding the construction of blank walls at street level and providing uses that generate liveliness at street level, while ensuring harmonious coexistence with residential functions.

- Control commercial advertising and billboards to limit their negative effects on the built environment and the streetscape.

THE TREATMENT OF INTERSECTIONS

The proper treatment of buildings at intersections contributes to wayfinding and allows for a harmonious transition to adjacent buildings along each street. The proper treatment of buildings should also provide openings on both street facades where the setting allows.

objective

13

Upgrade the public realm through coherent design of streets and other public spaces

UNIVERSAL ACCESSIBILITY

The Montréal Summit gave the Ville de Montréal an opportunity to reiterate and renew its long-standing commitment to the concept of universal accessibility. Since 1974, the City has been working to ensure that the public realm is accessible to persons with functional limitations. Its continued work in this domain led to the production in 2000 of a handbook entitled "La Ville de Montréal et les personnes handicapées et les personnes à mobilité réduite" (The Ville de Montréal and persons with handicaps and reduced mobility).

Universal accessibility is a guiding principle in the conception and layout of urban spaces and architecture. Its primary objective is to permit equal and safe access to all users of the City's buildings, public spaces and urban infrastructure. Limitations can be permanent or temporary, linked either to age or physical or intellectual disabilities. It is therefore important to plan urban development and design buildings in such a way that persons experiencing these limitations can go about their daily lives in the public realm free of obstacles or barriers.

Public spaces convey the collective sense of belonging to the City. Since, by definition, a City is a gathering place, all sites accessible to the public – parks, plazas and streets – represent its most valuable asset.

Coherent design of the public realm means that streets, sidewalks, parks, plazas and squares must be designed to be comfortable, safe and pleasant areas to visit in every season, especially for pedestrians. Some areas of Montréal still reflect a lack of care for public spaces and therefore project a tarnished image. In some cases, these areas represent an environment that has little regard for the comfort and safety of pedestrians, especially those with limited mobility.

In order to ensure that public spaces contribute to the definition of Montréal's urban landscape, the City intends to enhance the quality of the public realm. It also emphasizes the importance of pedestrians in the City and intends to encourage pedestrian travel through better design of public spaces.

action 13.1

Enhance the quality of the public realm

The design quality of the public realm is a cornerstone of the City's image and plays a decisive role in the comfort and safety of users. The quality of public spaces, like that of architecture, lies in its ability to reflect the City's culture and character. This quality lies not only in design, but also in the choice of materials, execution of work and maintenance of facilities. In this regard, the Ville de Montréal has to show leadership through exemplary projects on public property and encourage other stakeholders to act accordingly.

For many years Montréal has endeavoured to make winter life more pleasant by organizing outdoor activities in public places for residents and visitors. The design and maintenance of public spaces must also take winter into account, so that Montréal can be an enjoyable City to visit in any season.

Since Montréal is also a cultural metropolis, public art must contribute to the quality of its streets and other public places. The design of the public realm must therefore include different forms of artwork, both temporary and permanent.

THE QUARTIER INTERNATIONAL DE MONTRÉAL

The development of the Quartier International de Montréal (QIM) constitutes the single largest urban project to mark Montréal's Centre at the turn of the 21st century. Aimed at revitalizing a destructured area in the Ville-Marie Expressway corridor between the CBD and Old Montréal, the QIM project put an emphasis on the design of the public realm as a catalyst for the creation of a new image, fit to attract large-scale private investment. Bringing quality design together with local materials and expertise, all of the elements of the project (sidewalks, street furniture, lighting, public spaces and landscaping) were conceived with pedestrian safety and comfort in mind. The reconfiguration of Victoria Square and the creation of Place Jean-Paul-Riopelle also stimulated new real estate development, making the QIM the most vibrant arena for private investment in Montréal.

THE POLICY ON LARGE COMMERCIAL ADVERTISING AND BILLBOARDS

The Ville de Montréal intends to develop a Politique sur l'affichage commercial de grandes dimensions et les panneaux-réclames (Policy on Large Commercial Advertising and Billboards) by 2005 to ensure the general improvement of the urban landscape and road safety.

The Policy will provide for better control over the use of large commercial advertising and billboards, particularly along thoroughfares. It will also clarify the scope of the provisions of the Charter of the Ville de Montréal that authorize the removal of noncompliant billboards and signs. These provisions currently complement the Act to prohibit commercial advertising along certain thoroughfares. Historical areas that are recognized or classified under the Cultural Property Act are also subject to protective measures with regard to advertising signs and billboards.

The Policy could designate other areas where specific control measures should be applied: City gateways, riverbanks, the broad vistas and framed views of Mount Royal and other places that have historical or symbolic value for Montréal. The Policy will also aim to develop innovative control instruments and encourage excellence and creativity in commercial advertising.

Implementation measures

- Provide the City with adequate control mechanisms for the design and layout of the public realm, including the establishment of urban design guidelines as well as a policy on urban design and public art competitions.

- Increase the quantity and quality of Montréal's public spaces by preparing and implementing a program for the creation and improvement of public spaces.

- Ensure that winter is given more consideration in design, event organizing and maintenance of public spaces.

- Ensure the coordination of municipal actions with regard to the design of the public realm, thus ensuring a smooth transition at borough limits.

- Integrate works of art with the public realm, particularly when designing new public spaces while encouraging the private sector to do the same on both private and public property.

- Develop and implement the Politique sur l'affichage commercial de grandes dimensions et les panneaux-réclames (Policy on Large Commercial Advertising and Billboards).

- Regulate commercial advertising and billboards so as to limit their visual impact on public spaces and the urban landscape in general.

- Support the development and implementation of the Plan directeur d'élimination des fils et des poteaux (Wire and Pole Elimination Plan) by setting priorities as well as developing a by-law aimed at making the burial of power lines and other cables mandatory in newly urbanized areas.

THE WIRE AND POLE ELIMINATION PLAN

The mission of the Commission des services électriques de la Ville de Montréal (CSEVM) is to plan, construct, maintain and manage buried conduits for power lines and telecommunications cables on Montréal's territory.

The CSEVM is responsible for developing the Wire and Pole Elimination Plan, whose program is based on the following criteria:

- Fire hazards;

- Problems associated with the accessibility and importance of urban activities;

- The existence of average-density urban areas with concentrations of buildings over six storeys high;

- The presence of heritage, cultural or tourist sites.

The CSEVM is in favour of burying wires, since an underground power grid is safer and impervious to weather conditions. Its existing program covers the nine boroughs in the former Ville de Montréal and will soon be extended to the entire territory of Montréal. Under that program, the plan calls for the burial of 65.2 kilometres of existing overhead wires.

MONTRÉAL, A WINTER CITY

Winter adds a special dimension to the Montréal landscape. Snow puts buildings and vegetation in a new light and makes the City feel cozier. Due to the unavoidable issues of safety and accessibility, however, these positive aspects of winter are quickly overshadowed by snow-removal practices.

The Master Plan emphasizes the necessity of improving the City's adaptation to the realities of winter and ensuring that the design and maintenance of the public realm fosters the City's liveability, regardless of the season. The City intends on promoting winter-conscious design by taking the following measures:

- Plan and upgrade public spaces in terms of their use in winter, particularly for leisure and cultural purposes;

- Identify public spaces that require improvements in order to increase their accessibility and to attract more people during the winter;

- Take into account the needs of the mobility-impaired in designing the public realm;

- Design street furniture components suitable for winter conditions;

- Enhance the winter dimension of Montréal's nightscape within the context of the Plan lumière (Lighting Plan).

action 13.2

Promote pedestrian travel through improved public space design

The City recognizes the importance of pedestrians and the need to design public spaces accordingly. Every day Montrealers enjoy the benefits of walking, help make the City livelier and minimize the emission of pollutants by doing much of their travel on foot. Moreover, travelling by car, public transportation or bicycle all includes some walking.

Montréal already offers a friendly urban environment that generally allows for the safe and healthy coexistence of pedestrian and vehicle traffic. While the underground pedestrian network provides an alternative to the Centre's sidewalks, particularly appreciated in winter, the City places a priority on the quality of pedestrian routes and the liveliness of the public realm no matter the season. The construction of pedestrian skywalks over public spaces is therefore incompatible with the enhancement of the public realm, apart from the negative consequences they would have on Montréal's urban landscape and architectural heritage.

Many areas of Montréal that are designed on a human scale have exemplary characteristics that make walking safe, comfortable, efficient and stimulating.

In contrast, certain areas that are designed to facilitate automobile traffic are unappealing and often hazardous for pedestrians.

These areas usually have the following characteristics:
- Lack or excess of street furniture;
- Lack of vegetation;
- Sidewalks that are too narrow, in poor condition or nonexistent;
- Excessively wide roadways;
- Pedestrian routes that cross areas designed for cars (overpasses, interchanges, large parking lots, etc.).

Certain practices, such as permitting right turns on red lights (currently illegal throughout the City), can aggravate the pedestrian's feeling of discomfort and lack of safety.

Implementation measures

- Design public spaces in accordance with the stated design principles (see Design Principles for the Public Realm).

- Prepare a design guide for public roads that identifies parameters for traffic and facilities with a view to harmonizing or redesigning the geometry of certain streets and intersections.

- Harmonize the dimensions of streets with excessively wide roadways, particularly when doing road repairs, so as to improve pedestrian safety and comfort: wider sidewalks, tree planting and better lighting.

- Study the potential of pedestrianizing, permanently or temporarily, certain road segments after an analysis of the potential impacts on the balance of other urban activities and the quality of life of those living nearby.

- Establish coordination among major occupants of public property (STM, Bell, Canada Post, etc.) and the various municipal departments concerned with a view to a more rational use of sidewalks and roadways.

DESIGN PRINCIPLES FOR THE PUBLIC REALM

The following basic principles reflect the importance that should be accorded to pedestrians in the design and layout of the public realm:

- In areas with heavy pedestrian traffic, especially commercial streets, ensure the proper design of the public realm by:
  - Providing sidewalks whose width is uniform and sufficient to allow for comfortable and safe pedestrian traffic;
  - Ensuring signage and traffic signals to protect pedestrian movement and design intersections so as to favour pedestrian traffic;
  - Providing simple, lasting street furniture suitable to street's character, as well as functional, safe and aesthetic lighting;
  - Encouraging the integration of works of art;
  - Maximizing the planting of trees where the setting allows while guaranteeing the conditions and underground space necessary for their healthy growth;
  - Favouring the placement of street furniture and facilities such as bus shelters, mailboxes and telephone booths so as to facilitate pedestrian traffic and sidewalk maintenance.

- In residential areas, ensure the creation of a safe and friendly urban environment that favours pedestrian travel. The following characteristics should be pursued in this regard:
  - A structured, permeable street grid in continuity with existing streets;
  - Smaller blocks to encourage walking;
  - Narrower roadways to allow for on-street parking and to slow down traffic;
  - Sidewalks along streets;
  - Adequate lighting on streets and walkways.

- Ensure the comfort and safety of public plaza, square and park users by controlling the height of the surrounding buildings and integrating special landscaping criteria into their design particularly with regard to lighting, visibility and accessibility as well as wind and sun conditions.

objective

14

Ensure the positive contribution of large transportation infrastructure to the urban landscape

The Master Plan recognizes the role of public and road transportation networks in structuring Montréal's territory. Yet road planning is often done without sufficient consideration of potential impacts on the quality of life, architectural character and landscape of the areas crossed. In addition to their functional role, thoroughfares are important showcases that should reflect the economic, social and cultural vitality of the areas they cross.

Furthermore, the Master Plan considers public transportation as Montréal's transportation mode for the future and supports urbanization that fosters an increase in its use. The City wishes to take advantage of the potential for increasing the intensity of urban activities near certain metro and commuter train stations. This intensification, however, must be directed so as to maximize its positive effects both on the surrounding urban environment and on the use of the public transportation system (see Objective 3). The presence of existing and planned public transportation infrastructure raises important urban integration issues.

action 14.1

Improve the image of Montréal's main thoroughfares

Work done within and along main thoroughfares helps to shape the territory's image as well as user perceptions. Through raising the quality of design and construction, the City hopes to improve the image of expressway corridors and main thoroughfares, as well as provide road network users with quality landscaping.

In this regard, the planned design of an urban boulevard in the Notre-Dame Street East corridor as well as the reconstruction of the Métropolitaine Expressway and the Dorval and Turcot interchanges represents a unique opportunity to ensure coherent planning of road infrastructure, which takes into account its integration into the surrounding urban setting (see Objective 3).

Implementation measures

- Ensure, in cooperation with stakeholders, the integrated planning of road infrastructure projects, taking into account their impact on the surrounding urban environment and endeavouring to optimize urban integration of the infrastructure.

- Control construction along the main thoroughfares illustrated below and the planned roadways identified in Map 2.2.3 so as to address the following concerns:
  - The architectural quality of buildings and their contribution to the overall character of road segments;
  - Building designs and heights that provide a better framework for thoroughfares and increase density;
  - The integration of commercial signs with adjacent buildings;
  - Reduction of the visual impact of parking and manoeuvring, outdoor storage and handling areas;
  - Framing and improving the broad vistas and scenic views towards Mount Royal, the CBD or other significant features of the landscape.

- Regulate commercial advertising and the installation of billboards so as to limit their visual impact on thoroughfares (see Objective 13).

- Preserve and improve the vegetation and other natural features, such as the Saint-Jacques escarpment, that contribute to the greenery along certain sections of the network.

- Plant more trees along thoroughfares, especially where the built environment is destructured.

ILLUSTRATION 2.5.4   MAIN THOROUGHFARES

By improving the quality of design and construction work, the City hopes to improve the image of the following expressway corridors and main thoroughfares so as to ensure the quality of the landscapes seen by road network users.

1 Highway 40	9 Papineau Avenue	16 Ville-Marie Expressway
2 Saint-Charles Boulevard	10 Pie-IX Boulevard	17 Bonaventure Expressway
3 Saint-Jean Boulevard	11 Henri-Bourassa Boulevard East	18 Décarie Boulevard
4 Sources Boulevard	12 Louis-H.-La Fontaine Boulevard	19 Newman Boulevard
5 Highway 13	13 Jean-Talon Street East	20 Highway 138
6 Marcel-Laurin Boulevard	14 Sherbrooke Street East	21 Côte-de-Liesse Road
7 Highway 15	15 Souligny Avenue / Dickson Street / Notre-Dame Street East	22 Highway 20
8 Lajeunesse Street		

action 14.2

Improve the integration of public transportation infrastructure into the urban landscape

Public transportation corridors play a role in structuring the City, both through their physical presence and ability to attract activity as well as the urban liveliness generated by their use.

The integration of existing and planned public transportation infrastructure with the urban fabric is a major concern for the City, particularly in areas that are already urbanized, of heritage value or with important development potential. The creation of a light rail transit system (LRT) under study for Parc Avenue and René-Lévesque Boulevard West (see Objective 3) is part of this focus.

The Plan also aims to enhance the perception and image of public transportation in order to encourage its use. Thus the public spaces around metro, commuter train and intermodal stations, particularly the waiting areas, warrant special attention to facilitate access and create a safe and pleasant environment that meets the needs of every type of user.

Implementation measures

- Ensure, in cooperation with stakeholders, the integrated planning of public transportation infrastructure projects while taking into account their impact on the surrounding urban environment and their contribution to the character and vitality of the areas they cross.

- Design the public spaces around metro, commuter train and intermodal stations in keeping with the stated development principles.

DESIGN PRINCIPLES IN THE VICINITY OF PUBLIC TRANSPORTATION ACCESS POINTS

Public space design in the vicinity of public transportation infrastructure must take into account the following work to improve the comfort and safety of users accessing the network by foot, bicycle or bus:

- Continuous sidewalks of sufficient width;

- Landscaping;

- Appropriate lighting and street furniture;

- Bicycle parking.

As important places where people meet or pass through, the surroundings of metro and train stations should function as true public places for their surrounding neighbourhoods and be as pleasant as possible.

Similarly, public spaces should be designed to reduce potential conflict between pedestrian, cyclist and public transit vehicle traffic.

To be completely safe, crosswalks over road corridors need to be designed carefully (with lighting, pavement markings and traffic lights) to give pedestrians greater visibility and warn drivers of areas with heavy pedestrian traffic. Crosswalks must also be adapted to pedestrian needs, either by reducing the width of streets or by installing safety median strips at the busiest intersections.

Planning in the vicinity of metro and commuter train stations also requires the design of bus drop-off areas to facilitate connections. Park and ride arrangements should also be made safe, pleasant and practical for public transportation users and be equipped with sidewalks, proper lighting, landscaping, surveillance, etc.

Short and direct pedestrian routes that reduce walking distances between residential areas and public transportation infrastructure must also be given as much consideration as possible in planning street grids. In some cases, the development of safe crosswalks might be necessary to encourage the use of public transportation. Finally, buildings facing the street and designed so as to stimulate pedestrian activity along the sidewalks are especially desirable in the vicinity of metro and other stations.