





Pierrefonds-Ouest sector

Information document









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Message from Russell Copeman

Mayor of the Borough of Côte-des-Neiges-Notre-Dame-de-Grâce City Councillor

Member of the Executive Committee, responsible for housing, urban planning and property management and planning and of the Office de consultation publique de Montréal

With the Executive Committee's adoption of the mandate given to the Office de consultation publique de Montréal regarding Pierrefonds-Ouest, the future of this sector is now subject to public debate. The forth-coming consultation will provide a forum for important exchanges among the various stakeholders that will allow them to share their knowledge of the sector and contribute to the definition of a common vision for the coming decades.

Since the adoption of the Master Plan and the Policy on the Protection and Enhancement of Natural Habitats in 2004, the City has implemented a planning approach based on achieving a balance between the conservation of natural environments and the creation of a new residential neighbourhood focused on families in the western part of the Pierrefonds-Roxboro borough.

The municipal vision presented in this information document proposes the enhancement of natural environments and land development for residential purposes. Through this approach, the City promotes responsible development in close harmony with nature, and provides the means to conserve and maintain a vast ecological and recreational corridor on both sides of Rivière à l'Orme.

It is with great enthusiasm that I invite you to actively participate in this consultation that is getting underway so that, with everyone's contribution, Pierrefonds-Ouest will become an exemplary project that will benefit the entire Montréal community.

Rusall Coperna

Messages from elected officials



Message from Dimitrios (Jim) Beis

Mayor of the Borough of Pierrefonds-Roxboro
City Councillor
Member of the Executive Committee, responsible for procurement, sports and recreation, and communities of diverse origins

To follow up on the collaborative planning that has been done since 2005, we are proud to take part in the debate, as promised, on the fate of the Pierrefonds-Ouest sector.

By establishing a viable vision that ensures cohesive development between natural environments and living environments, this is an exceptional opportunity for the population to express its interest and concerns about what will become a legacy for future generations.

I invite you to take part in this consultation in order to establish a vision that will be shared by you, fellow citizens, and by the stakeholders in this project who are designing the development potential of our borough and our city.



Introduction



The Pierrefonds-Ouest conservation and residential development project has been the subject of a planning process that began in 2005. So far, this approach has allowed us to document the strengths and constraints of this territory and to lay the groundwork for an integrated project, combining family-oriented real estate development with the enhancement of natural environments.

In the fall of 2016, the Ville de Montréal entrusted the Office de consultation publique de Montréal (OCPM) with the mandate of holding a public debate among citizens on the future of the Pierrefonds-Ouest sector. At this time, the City intends to establish a dialogue with the public to discuss the issues regarding the sector and to agree upon a shared vision for its future. To this end, this information document outlines the project for the development and conservation of the sector.

Located at the western extremity of the Borough of Pierrefonds-Roxboro, the Pierrefonds-Ouest sector was designated as a sector to be built in the 2004 Master Plan, while respecting its natural heritage and in relation with the construction of a road link between Gouin Boulevard West and Highway 40 as a precondition. This intention was reiterated in the Montréal Urban Agglomeration Land Use and Development Plan adopted in 2015.

Covering an area of 455 hectares, this sector is home to a diversity of natural environments and uncultivated private land. Planning over the past few years has identified a strong guiding principle that will orient the development of the sector: namely, an integrated and balanced approach that seeks equilibrium between the conservation of natural environments and real estate development. The territory of Pierrefonds-Ouest is thus partly integrated into the ecoterritory of the ecoforest corridor of Rivière à l'Orme.

Through this document, the City submits this approach to public debate. After an overview of the status of the territory and the key findings, the document outlines a project for the conservation and development of the Pierrefonds-Ouest residential sector, identifies the main challenges facing its implementation, and concludes with the next steps to be taken following the public consultation of the OCPM.



1. Territory

Location



The Pierrefonds-Ouest sector is located at the western extremity of the Borough of Pierrefonds-Roxboro, in the western part of the Montréal urban agglomeration, along Rivière des Prairies and Lac des Deux Montagnes. It is bounded on the south by the towns of Kirkland and Sainte-Anne-de-Bellevue, on the west by the Village of Senneville, on the north by Gouin Boulevard West, and on the east by the highway right-of-way of the Ministère des Transports, de la Mobilité Durable et de l'électrification des transports (MTMDET).

Crossed by Rivière à l'Orme, the sector includes part of the l'Anse-à-l'Orme nature park. It is bordered by the Cap-Saint-Jacques nature park and the Bois-de-la-Roche agricultural park, an important component of the agglomeration's permanent agricultural zone.

Finally, the sector is bordered to the east and southeast by predominantly residential districts located in the Borough of Pierrefonds-Roxboro and in the Town of Kirkland.

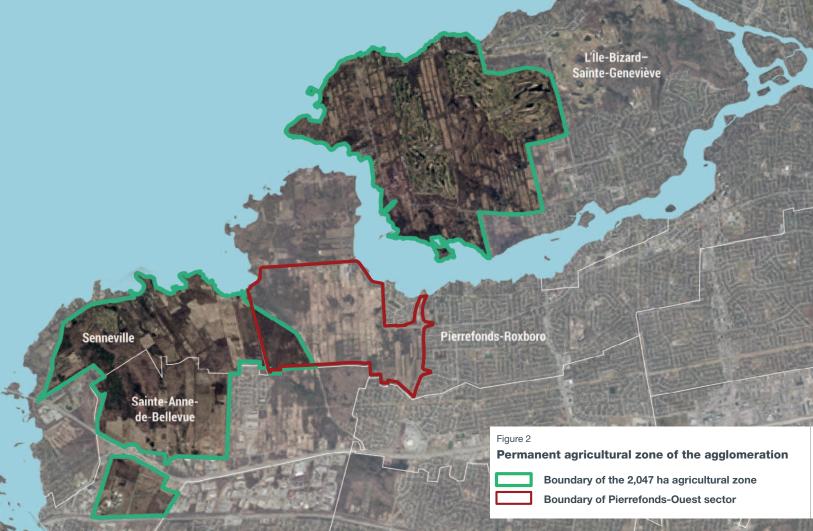


Rivière à l'Orme





Gouin West Boulevard



AGRICULTURE IN THE WEST ISLAND

At the beginning of the last century, the West Island of Montréal was covered with forests, swamps and farmland. The territory was developed and urbanized around transportation networks, first close to the railway corridors until the 1950s and then continuing around highways 20 and 40 between 1960 and 1980. In 1978, the Québec Act respecting the preservation of agricultural land and agricultural activities (Loi sur la protection du territoire et des activités agricoles) included part of the sector in the permanent agricultural zone.

Between 1987 and 1992, the provincial revision of the boundaries of the zone resulted in the exclusion of numerous plots of land across the urban agglomeration of Montréal, including 315 hectares in the territory of the former town of Pierrefonds. In Pierrefonds-Ouest, the farming of some of this land, particularly for the cutting of hay, continued for several years. Today, these plots have become mostly shrubby and herbaceous wildlands, making them harder to reuse for cultivation but increasing their ecological value.

Today, agriculture in the West Island mostly takes the form of collective and community projects and initiatives that contribute to the development of sustainable and multifunctional agriculture, integrated into the surrounding communities.

These include:

- The ecological farm of the Cap-Saint-Jacques nature park
- Santropol roulant's "Farmer's Commute" (Entre grange et gratte-ciel) peri-urban farm project in Senneville
- The "Cultivating Hope" (Cultivons l'espoir) program by the Regroupement des Magasins-Partage de l'île de Montréal at the Bois-de-la-Roche agriculture park in Senneville
- The Ferme Bord-du-Lac incubator farm on Île Bizard



Ecological farm of Cap-Saint-Jacques nature park



Key findings

The reflections made since 2005 regarding the Pierrefonds-Ouest sector have made it possible to recognize its uniqueness and importance within the agglomeration. In order to define the future vision for this territory, let us first examine the key findings of these reflections.

Héritage Sur Le Lac, in the northeast area of the sector



Agricultural strip (or swale)



A landlocked and unserviced sector

Real estate development in the western part of the Pierrefonds-Roxboro borough is already underway and it is putting pressure on the existing road network. Over the past few years, more than 200 residential units have been built in the sector, mainly along Gouin Boulevard West.

Continued development south of Gouin Boulevard West in the Pierrefonds-Ouest sector is conditional on the improvement of accessibility for all modes of transportation. The lack of a north-south road link is the main constraint on the development of the sector and on its being served by an efficient public transit system.

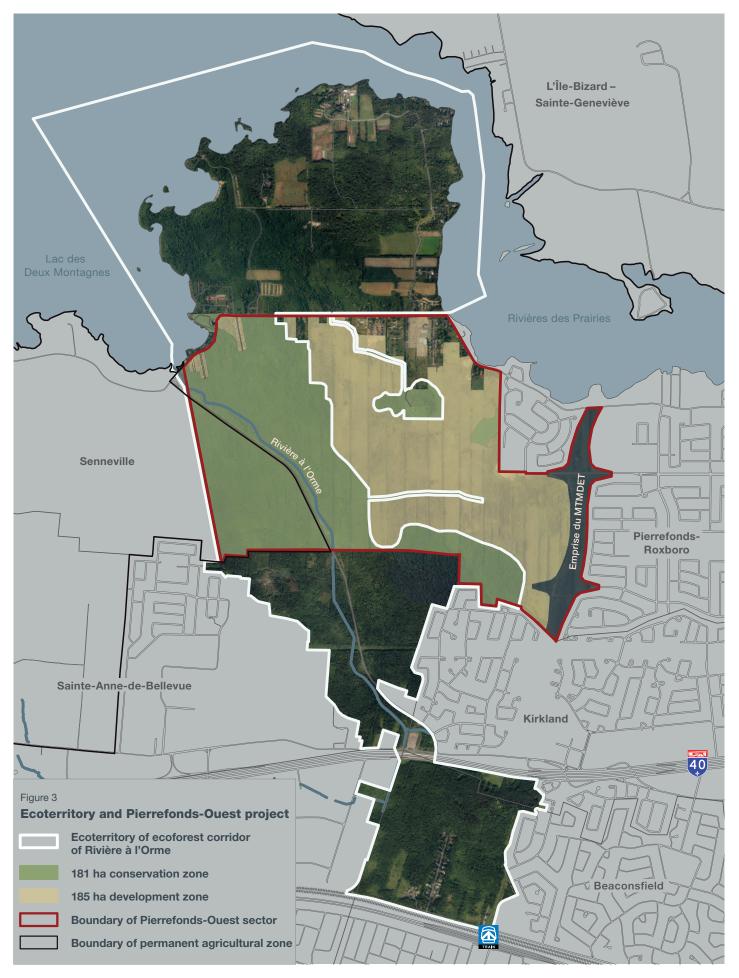
At present, the discontinuity of the road network locks in a large part of the Pierrefonds-Ouest sector and limits exchanges with the neighbouring sectors. On the east-west axis, Pierrefonds Boulevard and Antoine-Faucon Street, which would allow access to the centre of the future district, currently terminate as dead ends on the edge of the MTMDET right-of-way.

Furthermore, the absence of underground infrastructures (aqueducts and sewers) and the lack of collective services and facilities are also major issues to be considered in the development of the Pierrefonds-Ouest sector.

High value natural landscapes and spaces

The area has a rich natural heritage and a diversity of landscapes that give it a distinctive character that must be protected and enhanced, such as Rivière à l'Orme (the only inland river on the island of Montréal bordered on both sides by floodplains), forest stands, grassland, shrubland, swamps, woodland, and the 90 and Lauzon marshes and the A, Lauzon and O'Connell streams. These natural environments harbour several rare floral species and serve as habitats for many animal species.

Similarly, the landscapes are a reflection of the history of the area and play an important role, both in terms of the sector's image and its identity. In this respect the waterside roadway along Gouin Boulevard West has valuable landscape and heritage characteristics that must be protected and valued.



2. Planning context

Planning activities



Pierrefonds-Ouest technical committee, February 2008

A planning process involving municipal and government stakeholders as well as major property owners was initiated in 2005, following the adoption of the Master Plan and the Policy on the Protection and Enhancement of Natural Habitats in 2004.

From 2005 to 2008, a technical committee carried out a planning exercise for the Pierrefonds-Ouest sector. Bringing together various departments of the Ville de Montréal, the Borough of Pierrefonds-Roxboro, the ministère du Développement durable, de l'Environnement et de la Lutte aux changements climatiques (MDDELCC), as well as the main landowners, this approach has helped to define a conservation zone of natural environments and has led to the creation of site development hypotheses that are based on the conservation project.

This has resulted in agreements with major landowners to ensure the protection of natural environments.

Development and conservation



Real estate development near marsh 90

The planning process undertaken over the past years has established a comprehensive and integrated vision to achieve a harmonious balance between the conservation needs of existing natural heritage and real estate projects. The exercise allowed for the inclusion of a critical mass of natural habitats on both sides of Rivière à l'Orme in the enhancement project.

The building sites, selected in order to preserve natural habitats, cover an area of 185 hectares, while the areas dedicated to conservation will expand the L'Anse-à-l'Orme nature park to cover an area of 181 hectares. This conservation zone includes part of the permanent agricultural zone provided for (62.3 hectares located west of l'Anse-à-l'Orme Road) and forms part of the ecoterritory of the ecoforest corridor of Rivière à l'Orme.

It should be noted that, in 2008, the conservation project was the subject of a letter of agreement between the Borough of Pierrefonds-Roxboro and the MDDELCC in order to compensate for the loss of wetlands caused by planned residential construction within the framework of the Pierrefonds-Ouest project.

Land tenure

The land in the Pierrefonds-Ouest sector is largely privately owned. In recent years, several properties were acquired by the City to enhance and expand the conservation area. In the same perspective, more properties have been identified and will be subject to future exchanges or transfers to the City. In the western part of the sector, 62.3 hectares of land are located in a permanent agricultural zone. Of this area of wooded and swampy land, 40% has already been acquired by the City for conservation purposes. Only one lot remains privately owned.

Commitments made by landowners regarding the transfer of plots of land necessary for the consolidation of the conservation zone and the enhancement of the marshes and streams located within the development zone will have to be outlined and formalized within the framework of a special planning program (SPP), to be established.

Figure 4

Land tenure (2016)

Private property

Ville de Montréal

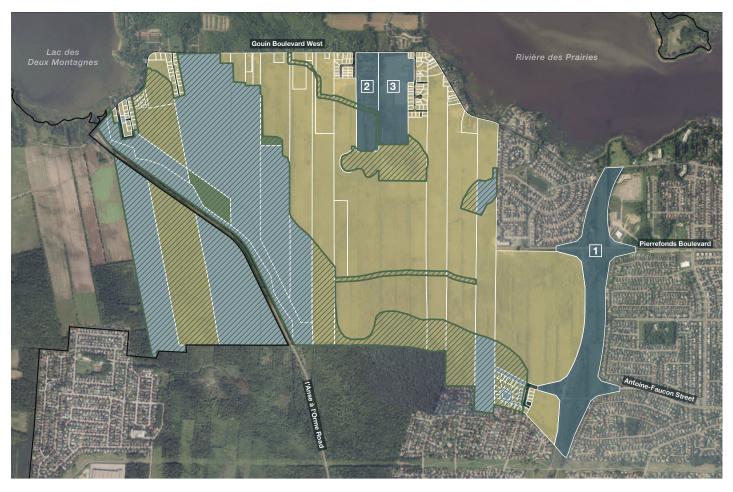
Other institutional owners

1. MTMDET (Government of Québec)
2. Fabrique de Sainte-Geneviève
3. Collège Charlemagne

Private non-profit organization
Ducks Unlimited Canada

Boundary of conservation area

Boundary of permanent agricultural zone



Territorial vocations

The Pierrefonds-Ouest sector is part of a vast territory whose vocations have evolved over the last few decades. In 1991, lands east of L'Anse-à-l'Orme Road were withdrawn from the permanent agricultural zone. In 2004, the Master Plan identified the excluded zone as a sector to be developed, while respecting the natural heritage.

Since then, a conservation area covering the western part of the sector has been defined and integrated into the ecoterritory of the ecoforest corridor of Rivière à l'Orme (see delineation, p.10), one of the ten ecoterritories that resulted from the Policy on the Protection and Enhancement of Natural Habitats of the Ville de Montréal and that were defined in the Montréal Urban Agglomeration Land Use and Development Plan.

The Plan recognizes land use devoted to conservation for a portion of the conservation zone of Pierrefonds-Ouest, particularly for land that is already owned by the City and annexed to the l'Anse-à-l'Orme nature park, as well as for land located within the boundaries of the permanent agricultural zone (Figure 5). In the latter case, in spite of the "conservation" designation, agricultural activities respecting the flood zone and wetlands are authorized in accordance with the Québec Act respecting the preservation of agricultural land and agricultural activities (Loi sur la protection du territoire et des activités agricoles) and the Environment Quality Act. On private land, construction is limited to the residence of a farm operator and to the buildings and structures required for agricultural activities.

The remainder of the sector is designated as a predominantly residential area, to be developed in accordance with the existing natural environments, particularly marshes. The Pierrefonds-Ouest project would permit the construction, in the medium term, of some 5,500 housing units, focused mainly on family housing needs, thus helping to retain families in Montréal.

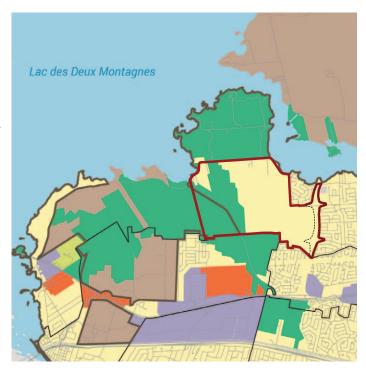


Figure 5
Land Use and Development Plan 2015:
Major land use zones

Predominantly residential: Predominantly residential area covering most of the territory of the agglomeration.

Mixed activities: Diversified activity area, generally located at the intersection of or along transportation infrastructures, which may include the possibility of intensification and diversification of urban activities, while respecting the characteristics of its environment.

Industry: Economic area consisting of a set of establishments that produce goods or provide services.

Agricultural: Area reserved for agriculture and agricultural activities within the definition of the Act respecting the preservation of agricultural land and agricultural activities (ARPALAA), which includes the cultivation of soil and plants, horticulture, maple syrup production and animal husbandry.

Conservation: Area reserved for the protection, enhancement and development of biodiversity and the natural and landscape heritage, located within the perimeter of urbanization or a permanent agricultural zone.

Large recreation or green space: Area reserved for other large green spaces within the agglomeration, as well as green spaces giving physical or visual access to shorelines, riverbanks and islands, as well as to large cemeteries.

as well as to large cemeteries.

MTMDET transportation right-of-way

Boundary of Pierrefonds-Ouest sector

Projects under consideration

Planning for the Pierrefonds-Ouest sector is being carried out in conjunction with two other structuring municipal projects, which are also in the planning phase: the development of an urban boulevard within the MTMDET right-of-way and the enhancement of the ecoterritory of the ecoforest corridor of Rivière à l'Orme.

In addition, the western part of the island must accommodate a section of the future Réseau électrique métropolitain (RÉM), a major project of the Caisse de dépôt et de placement du Québec (CDPQ), which the City must take into account when planning its work.

1. Boulevard within the MTMDET right-of-way

The project to build a new urban boulevard within the MTMDET right-of-way has been an integral part of the Ville de Montréal's planning for several years. This project is part of the Transportation Plan, adopted in 2008, and the Montréal Urban Agglomeration Land Use and Development Plan, adopted in 2015.

The Ville de Montréal wishes to develop a 2.8-kilometre urban boulevard that will link Gouin Boulevard West to Highway 40 service roads. Shared by the Borough of Pierrefonds-Roxboro and the Town of Kirkland, this new north-south boulevard will improve service to the adjoining residential areas, as well as to all the municipalities that make up the West Island. This boulevard will allow for the enhancement of the Pierrefonds-Ouest sector.

The configuration of the urban boulevard will place emphasis on public transit and active modes of transportation by setting up cycling paths and by applying urban design practices that ensure comfortable and safe pedestrian movements.

As part of the development of the project, the Ville de Montréal is working with the CDPQ to align the boulevard planning with the Réseau électrique métropolitain (RÉM) project (see project description on the following page). It is also working in conjunction with MTMDET to complete the study assessing the feasibility of constructing an urban boulevard within the targeted right-of-way without compromising its future use by the Government of Québec.

Because of its scope, the construction of the urban boulevard is subject to the evaluation process and environmental impact review by the Bureau d'audiences publiques sur l'environnement (BAPE).



Future axis, at the intersection of Pierrefonds Boulevard



Opposite: Northern portion of the future urban boulevard, on the edge of the Pierrefonds-Ouest sector



Image of a typical station (credit: CDPQ)

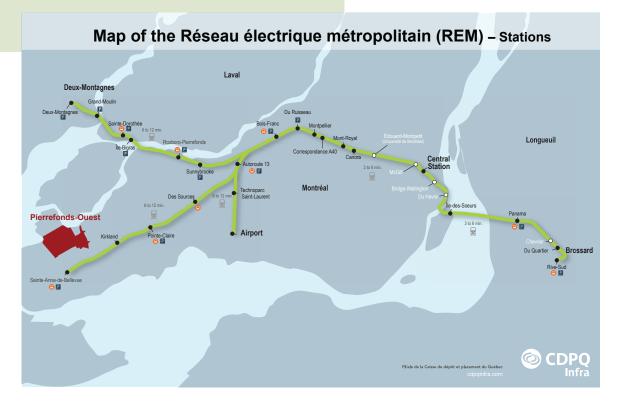
RÉSEAU ÉLECTRIQUE MÉTROPOLITAIN (REM)

CDPQ Infra, a subsidiary of the Caisse de dépôt et placement du Québec (CDPQ), recently announced a proposed 67-kilometre integrated public transit network that would link downtown Montréal, the South Shore, the North Shore and the Montréal-Trudeau airport. None of the 24 proposed stations would service the Pierrefonds-Ouest area directly, but the Kirkland and Sainte-Anne-de-Bellevue stations, to be built along Highway 40, would be located nearby.

The cost of the project, estimated at \$5.5 billion, would be shared between the CDPQ and the governments of Québec and Canada. The CDPQ recently submitted the project to the BAPE. If all the steps are successfully completed, work is scheduled to start in the spring of 2017 and the system will be put into service near the end of 2020.

For additional information:

https://www.cdpqinfra.com/en/Reseau_electrique_metropolitain



Ecoterritory of ecoforest corridor of Rivière à l'Orme **Boundary of ecoterritory Boundary of Pierrefonds-Ouest sector Boundary of boroughs** and reconstituted cities

2. Ecoterritory of ecoforest corridor of Rivière à l'Orme

Stemming from the various planning documents adopted by the municipal administration since 2004 and reiterated by the 2015 Montréal Urban Agglomeration Land Use and Development Plan, the ecoterritory of the ecoforest corridor of Rivière à l'Orme constitutes a vast ecological and recreational corridor located between Angell Woods, the Bois-de-la-Roche agricultural park and the Cap-Saint-Jacques nature park.

The ecoterritory extends on both sides of Rivière à l'Orme and includes the Pierrefonds-Ouest conservation area (181 ha). Combined with other major conservation areas in the sector (Bois-de-la-Roche agricultural park, Morgan Arboretum, Cap-St-Jacques nature park), the ecotourism project of the ecoforest corridor of Rivière à l'Orme (423 ha) provides a critical mass of natural habitats and environments (1,000 ha) that will guarantee a relatively fluid ecological connectivity for the flora and fauna of the west of the island.

This conservation project will translate into a concept plan, which is currently being drawn up, and will determine the interventions to be carried out.

The objectives are to:

- Create a viable ecological corridor of great biodiversity around Rivière à l'Orme;
- Create a recreational corridor linking the Train de l'Ouest stations¹
 to the Cap-Saint-Jacques nature park and the Bois-de-la-Roche agricultural park;
- Maintain Rivière à l'Orme water quality and ensure appropriate water levels;
- Consolidate the boundaries of the l'Anse-à-l'Orme nature park and
 of the Bois-de-la-Roche agricultural park through the conservation of
 natural environments of ecological interest.

This project is at the development stage of the preliminary concept plan. A by-invitation-only consultation workshop was held on December 3, 2015, to define the vision for the ecoterritory. This planning process will help to determine the type of interventions to be carried out in the 181-hectare conservation zone in the Pierrefond-Ouest sector.

^{1.} Existing stations are supplemented by those planned for the RÉM.

3. Development vision

Building on the planning process of the past few years, the vision proposed by the City focuses on an integrated and balanced approach between the need to preserve natural environments and the urban development potential of the sector. The elements of this vision are outlined in the following pages and are guided by the wish to create a distinctive and innovative new neighbourhood with high quality green spaces, sustainable solutions with respect to development and transportation, and a collective wealth for future generations.



The natural environments and landscapes are valued and become the vectors of the development of the sector

Rivière à l'Orme, which winds through the territory from south to north, is the backbone of a fauna and flora environment that was formed and consolidated over time while coexisting with the agricultural activities that have marked the landscape of the sector. Today, the ecological wealth of this natural environment and the traces left by its agricultural past forge the identity of the sector and pave the way for its development.



Principle 1: Preservation of a viable ecological corridor and rich biodiversity

The vision supported by the City is based on the creation of a vast protected ecological territory along Rivière à l'Orme and on the conservation of a mosaic of wetlands, watercourses, shrubland and grasslands covering an area totalling 181 hectares (see Figure 7, page 23). The creation of this conservation zone will allow for:

- The preservation of mature forests and of a significant area of wild land to support the food sources of certain animal species;
- The breeding of certain bird species that are of interest and the protection of the brown snake's habitat;
- The preservation of wetland concentrations in the lowlands and the Rivière à l'Orme floodplain to protect certain wildlife habitats;
- The maintenance of an ecological link between the Bois-de-la-Roche agricultural park, the Anse-à-l'Orme nature park and the woods north of Sainte-Anne-de-Bellevue;
- The preservation of the two marshes located in the development zone.



Principle 2: Development of the swales

Considering their role as important landmarks within the sector, the landscape entities that bear witness to the agricultural past of the area must be treated with particular care, particularly with respect to some of the agricultural forested strips (swales) on the site.

Swales are wide and shallow ditches with gently sloping banks, and were developed for drainage and water irrigation as part of agricultural activities. In addition to contributing to the collection and regulation of rainwater run-off, the swales are part of the sector as a landscape entity that shapes and paces the landscape.

Principle 3: Integration of urban agriculture

Planning the Pierrefonds-Ouest sector is an opportunity to design an innovative model of urbanization to ensure a smooth and harmonious transition between established neighbourhoods and exceptionally rich natural and agricultural environments.

The integration of light agricultural activities (ecological gardening, mushroom growing, aquaponics, bee keeping, etc.) and of food distribution sites in public and private areas of the sector must be encouraged. By contributing to residents' quality of life and enhancing the unique features of the territory, this strategy promotes the creation of a viable community, firmly rooted in its environment.

Principle 4: Preservation of the Gouin Boulevard West waterside road

Gouin Boulevard West gives the area an uncommonly picturesque character with its stunning landscape heritage and beautiful views of Rivière des Prairies. Moreover, the presence of buildings of heritage interest, the value of which is recognized in the Master Plan, and of Collège Charlemagne, contribute to the uniqueness of the sector.

Construction or urban development projects on Gouin Boulevard West must reflect and respect the main characteristics of this built, landscaped, natural and archaeological heritage, particularly with regard to the division of building plots, volumetry, architecture and tree cover.



Agricultural swale







The new neighbourhood is diversified and connected to its surroundings

The new neighbourhood is home to local services and community amenities that benefit a diversity of residents. Located in the extension of established communities in the Borough of Pierrefonds-Roxboro and benefiting from multiple connections to existing travel networks, the neighbourhood opens up to its environment while protecting its natural and landscaped attractions.



Commercial hub in the heart of Town of Mount Royal

Principle 5: Reaching viable residential density and diversity

The viability and dynamism of the new community will be achieved with an average residential density of 35 units per hectare over most of the site, as prescribed by the Urban Agglomeration Land Use and Development Plan, i.e. a capacity of 5,500 housing units.

In addition, residential projects must offer a diverse range of housing types to foster social mixing and to respond to different household needs, including those of families in various income brackets. In order to achieve the objectives of the City's Strategy for the inclusion of affordable housing, the offer must include at least 30% affordable and social housing.

Principle 6: Development of a dynamic and accessible multifunctional hub

In order to shape a balanced and harmonized environment, the distribution of uses, densities and types of housing must be modulated according to the characteristics and potential of each environment.

Consequently, building densities and traffic-generating activities must be located to ensure a compact development that takes into account the presence of natural environments and that respects the principles of accessibility by active and collective transportation. Commercial, institutional and public uses must be grouped together in order to form a dynamic multifunctional core in the heart of the neighbourhood, on both sides of Pierrefonds Boulevard.



Principle 7: Networking of parks and green spaces

A network of public green spaces must be created in order to integrate the natural and landscaped entities within the community and to offer the future population a quality living environment. It follows that the enhancement of natural environments must be complemented by a special treatment of the areas interfacing with the new neighbourhood, with the creation of local parks to be connected by green corridors that foster interactions within the sector.

As active transportation links or recreation areas, the green corridors would facilitate the connection between the neighbourhood units, the multifunctional hub, public transit infrastructures, parks, natural environments, community amenities and the Gouin Boulevard West waterside road.



The user-friendly character of the new neighbourhood requires a coherent and efficient management of the flow of all types of traffic. In order to do this, the sector must be built to accommodate active transportation and to integrate an efficient, appealing and easily accessible public transit system that will effectively service both Pierrefonds-Ouest and the adjacent sectors.

The multifunctional network (for pedestrians and cyclists) to be established should ensure effective links between neighbourhood units, centres of activity, parks and neighbouring sectors, while facilitating connections with the existing and planned Montréal-wide cycling network. Moreover, the design and the layout of the streets should make it possible to restrict the intensive use of local roads for motor vehicle travel within the neighbourhood, while offering several possible routes and contributing to the opening up of the sector.









The sector differentiates itself with a quality environment and innovative amenities

Urban ecology and sustainable development form the basis of the development of the sector, contributing to achieving high environmental performance. Distinguished by innovative architecture, design and urban design and meeting the highest standards of quality, the Pierrefonds-Ouest sector reduces its ecological footprint to a minimum.



Principle 9: Quality of the public realm

The identity of the neighbourhood is intrinsically linked to interventions that will shape the urban space and create a specific atmosphere favouring the development of an attractive and sustainable neighbourhood. To do this, the development of the sector must rely on a user-friendly and safe public realm as well as on a contemporary design.

Streets, cycling paths, sidewalks and public spaces must be designed in such a way as to make them comfortable places to socialize and where it is pleasant to move about safely. The vitality of the sector is also based on the treatment of entrances to the neighbourhood and the layout of streets to establish atmosphere, thus creating distinct environments and animated and welcoming spaces through the use of, for example, urban forestry or public art.

Principle 10: Development of exemplary and evocative architecture

Distinguished by its scale, its unique characteristics and, above all, by the presence of natural environments of interest, the sector offers the potential to establish an architecturally innovative community. The development of an exemplary and evocative architecture must translate into quality architectural features (surfacing materials, balconies, cornices, roof shapes, facade modulations, etc.) as well as the use of environmentally friendly practices, techniques and materials.



Principle 11: Preventing the formation of heat islands

The new neighbourhood must aim for the highest ecological standards, particularly with regard to the presence of urban heat islands. To minimize the occurrence of these high temperature zones, the planning of the area must limit the presence of large paved areas and restrict the use of materials that absorb heat.

In addition, the planting of many trees, shrubs and vegetation along streets and trails as well as in public spaces and parking areas would counter the heat island phenomenon and contribute greatly to the quality of life and the image of the sector.



Aiming for an approach that is sensitive to the demands of a sustainable environment, the City proposes the integration of urban structures and facilities that allow a responsible management of stormwater, both in private and public areas, with a view to preserving natural environments.

The application of principles to retain waters at the source (filtering gardens, porous materials, collection of run-off waters from roofs, etc.), reduce impervious surfaces and ensure that protected marshes and rivers are supplied with water would enable the control of the quantity and quality of run-off waters and reduce their impact on rivers and streams, as well as on municipal infrastructures.







Concept of spatial organization

- Prior development of an urban boulevard within the MTMDET right-of-way
- Creation of a 181-hectare conservation zone
- Residential construction of nearly 5,500 units on a 185-hectare area
- Extension of Pierrefonds Boulevard and Antoine-Faucon Street
- Creation of a multifunctional hub at the heart of the development zone
- Networking of parks and development of welcome areas
- Development of main entrances to the sector
- Integration of agricultural swales into the neighbourhood development plan

Figure 7

Concept of spatial organization



Welcome areas for parks

Agricultural swales to be integrated

New urban boulevard

Main roads to be created

Entrances to the sector





4. Key challenges

The proposed vision for the Pierrefonds-Ouest sector is a long-term one. Indeed, the horizon for the development of a territory of this size must be measured in terms of decades. In addition, major efforts will have to be made to transform an agricultural wildland into an exemplary neighbourhood and to continue to protect the natural environments that contribute to the sector's rich diversity.

The last ten years of planning have already made it possible to take stock of the challenges related to the development of the Pierrefonds-Ouest sector. The sector presents important challenges that must be remembered.

Opening-up and servicing the sector

The development of Pierrefonds-Ouest, located in a landlocked and unserviced area, is dependent on the establishment of efficient transportation infrastructures and underground infrastructures. Before building this area, it is necessary to construct an urban boulevard between Gouin Boulevard West and Highway 40, within the right-of-way along Highway 440, belonging to the MTMDET.

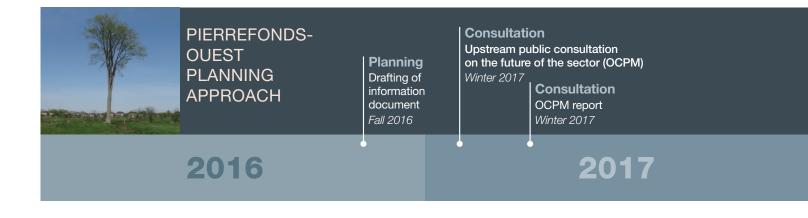
The development of the sector also requires the establishment of an efficient and user-friendly local traffic network, the development of parks and green spaces, the establishment of an ecological rainwater harvesting system, and interventions on the network of underground infrastructures, which are necessary to adequately service the site in terms of water supply and sewer systems.

The nature of the necessary interventions, the stages of implementation and the cost sharing will be specified in accordance with the by-law concerning agreements on certain municipal works, as part of the agreement to be negotiated between the City and landowners.

Achieving a balance between protecting the natural environments and creating a new neighbourhood

For more than a decade, discussions with land owners in the sector and the MDDELCC have made it possible to define a project for the conservation of natural environments and a plan for the protection of and compensation for the Pierrefonds-Ouest wetlands. Covering an area of 181 hectares, the conservation zone is composed of a variety of forested areas, a woodland with the status of exceptional forest ecosystem, wildlands, small streams and wetlands, to which are added two large marshes located in the heart of the sector to be developed.

Through the possible adoption of a Special Planning Program, the City and the Borough of Pierrefonds-Roxboro aim to effectively frame developments within this sensitive territory by adopting the means to ensure the protection and the enhancement of existing landscapes, natural environments and biodiversity cores. Through a global and integrated approach, the process aims to achieve a harmonious balance between the need to preserve natural heritage and the development of a neighbourhood with a unique identity and character.



5. Next steps

Following the winter 2017 public consultation, the Pierrefonds-Ouest planning process could lead to the development and adoption of a Special Planning Program (SPP) in the winter of 2019. The main steps to be taken are outlined below.

The SPP would integrate the results of the municipal planning of the new urban boulevard and of the ecoforest corridor of Rivière à l'Orme, two major inputs for the development of the sector.

