

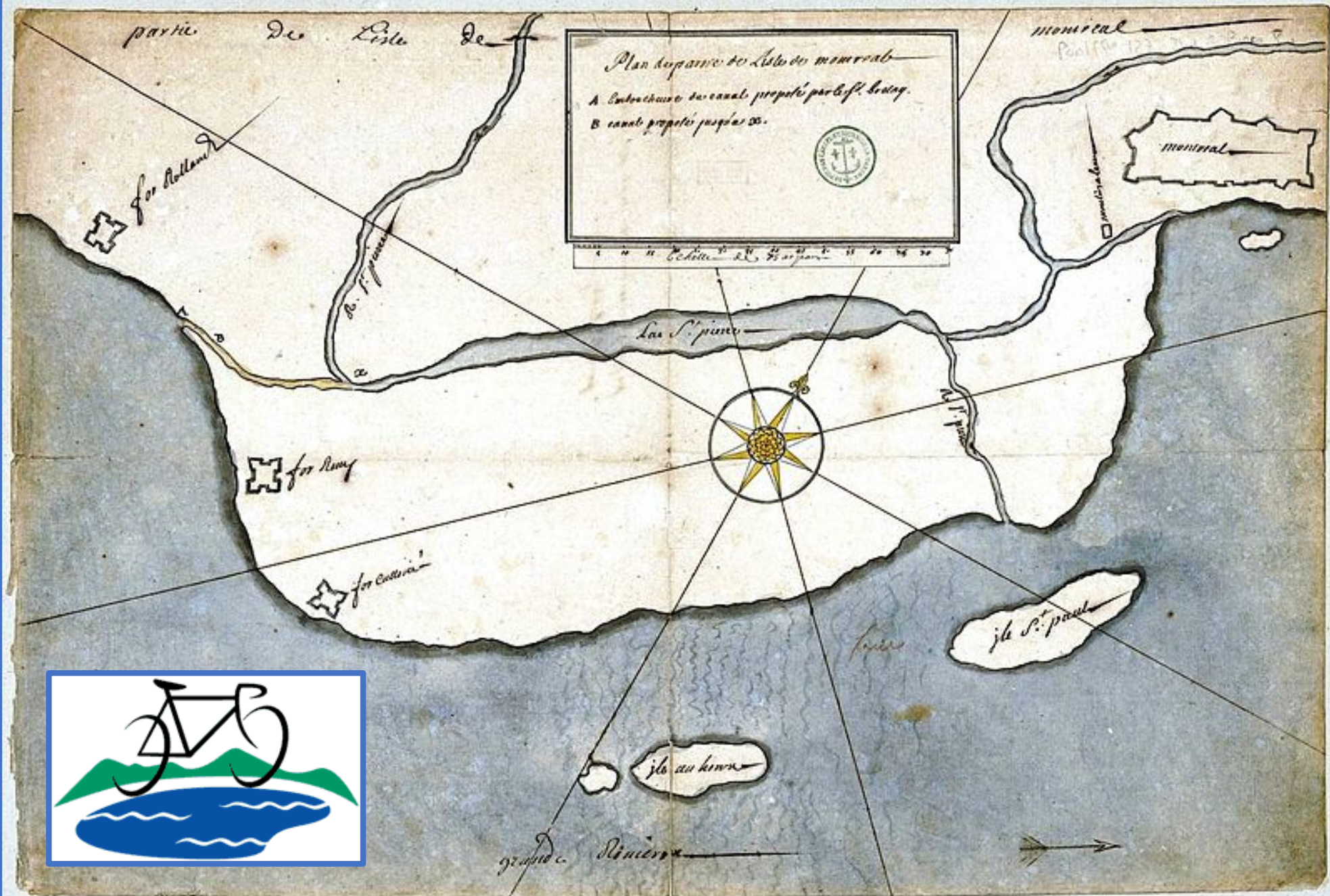
**OCPM CONSULTATION for  
the NEW NATURE PARK in the TURCOT YARDS**

**Presentation by LOUISE CHENEVERT,  
For**

*BALLADE de la RIVIERE - ST PIERRE - RIVER RIDE*

**November 20<sup>th</sup>, 2018**

# BALLADE de la RMMERE - ST PIERRE - RIVER RIDE



**Mission :** Enhance the hydrology legacy of the Island of Montreal. We use the longest island river as a way to link the natural green spaces of Mount Royal, Meadowbrook and the St Jacques escarpment.

**The Ride :** Travelling by bicycle is an innovated approach to understanding the island's geography by creating an immersive experience. During the ride we travel through time and space discovering the importance of water to the First Nation people's survival, navigation and trade, as well as sustain the biodiversity of faunic and florid life. We look at the historical role of the river in the establishment of the City as well as the Country through the fur trade. Followed by the industrial age where Otter Lake was drained into the Lachine Canal and the St Pierre River was buried in sewers. We discuss the legacy of putting rivers in sewers and the engineering nightmare we have inherited. The large infrastructure projects of the past centuries have changed the landscape of the island and fragmented green spaces. Along our journey we stimulate discussions on the environmental impacts and the present day dilemmas.

**Goals:** To create a team of professionals as cartographers, urban planners, engineers, ecologists and educators. To envision innovative and integrated solutions to include water in our urban environment through '*Daylighting*' rivers thus by enhancing the value of green spaces, increasing biodiversity and creating wildlife corridors.

- To improve storm water management by creating blue alley and garden projects to avoid future flooding.
- To create connection for pedestrians and cyclists.
- To reduce heat islands thus improving the overall well being of citizens by creating healthy urban communities.



*St PIERRE RIVER on  
MEADOWBROOK in the  
WINTER*

*Photo taken by: Louise Chenevert*



*Louise Chenevert*



Tsi Tetsionitiotiakon watershed map  
LAKES & RIVERS on the ISLAND of MONTREAL



Many of the **45** rivers and **10** lakes on the island would have been canoe passable and thus formed a fabric for agriculture, communication and trade.

INDIGENE COMMUNITY <https://sites.google.com/site/indigenecommunity/homes/5-tiohtiake-Mohawk-placenames>

# Montreal ordered to bury or divert last remnant of St-Pierre River

MARIAN SCOTT, MONTREAL GAZETTE Updated: July 10, 2018



30 ANS COLONNATE LES ANS DE MEADOWBROOK  
Little St. Pierre River winds through the Meadowbrook Golf Course.

## 1. MEADOWBROOK GOLF COURSE

On this west end green space flows the last remnant of the Little St. Pierre River, once a spirited stream that rambled from the slopes of Mount Royal to Côte St. Luc, Ville St. Pierre, St. Henri and Verdun, with tributaries to Pointe à Callière in Old Montreal and Angrignon Park in LaSalle.



COURTESY OF POINTE À CALLIÈRE MUSEUM  
Montreal 1701: Illustration by Francis Back shows the Little St. Pierre River flowing inland past Pointe à Callière.

## 2. LAC ST. PIERRE

Later called Lac à la Loure (Otter Lake), this lake had become a marsh by the mid-19th century. Swampy conditions caused no end of problems, when it became a rail-way yard in for the Grand Trunk Railway at the turn of the 20th century.

## 3. THE GLEN

Several Westmount streams converged into one at the Glen and tumbled down the hill. In St. Henri, a mill and tanneries clustered along the stream, which was joined by the St. Pierre River.

## 4. BURNSIDE

Fur trader James McGill named his country estate, Burnside, after the burn — the Scottish word for stream — that ran across it. McGill bequeathed his farm and fortune to McGill University, where the name of Burnside Hall recalls the former stream.



COURTESY OF JACQUES MADRAK  
William Collector at Pointe à Callière museum.

## 5. WILLIAM COLLECTOR

An engineering feat when it was built between 1832-50, this stone sewer diverted part of the St. Pierre River.

## MONTREAL ISLAND'S WATERWAYS

**BLUE:** Existing waterways

Source: Réseau de suivi du milieu aquatique, Montreal

**ORANGE:** Rivers and streams that have been diverted underground.

Source: City of Montreal (1958) and Montreal Daily Herald (1925)



SATELLITE IMAGE BY GOOGLE EARTH  
GRAPHIC BY THE GAZETTE



# Parc Écologique de l'Archipel de Montréal

<http://www.greencoalitionverte.ca/parc/PPEAM%20cartes.htm> <http://ceintureverte.org/>

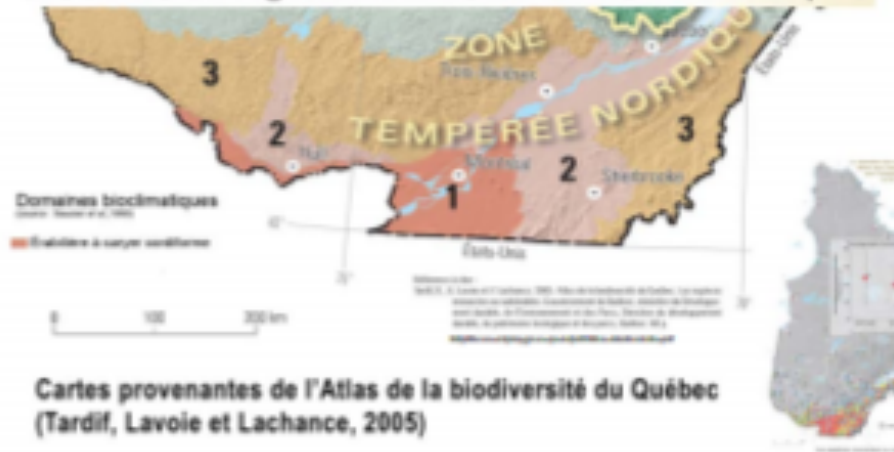




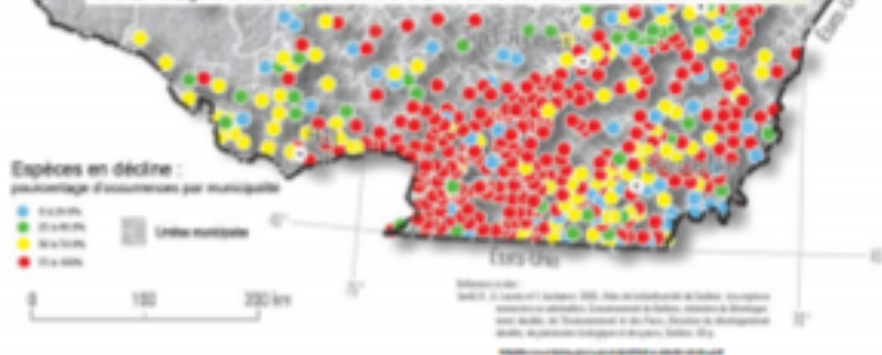
La zone d'intervention pour le projet du Parc écologique de l'archipel de Montréal est située dans le domaine bioclimatique de l'érablière à caryer cordiforme, dans le sud-ouest du Québec. C'est dans ce domaine que la concentration des espèces en péril est la plus haute !



Les zones de végétation et les domaines bioclimatiques



Les espèces menacées ou vulnérables en déclin



The Montreal Archipelago has the greatest BIODIVERSITY. And also has the highest concentration of species at **RISK** in the whole of Quebec.



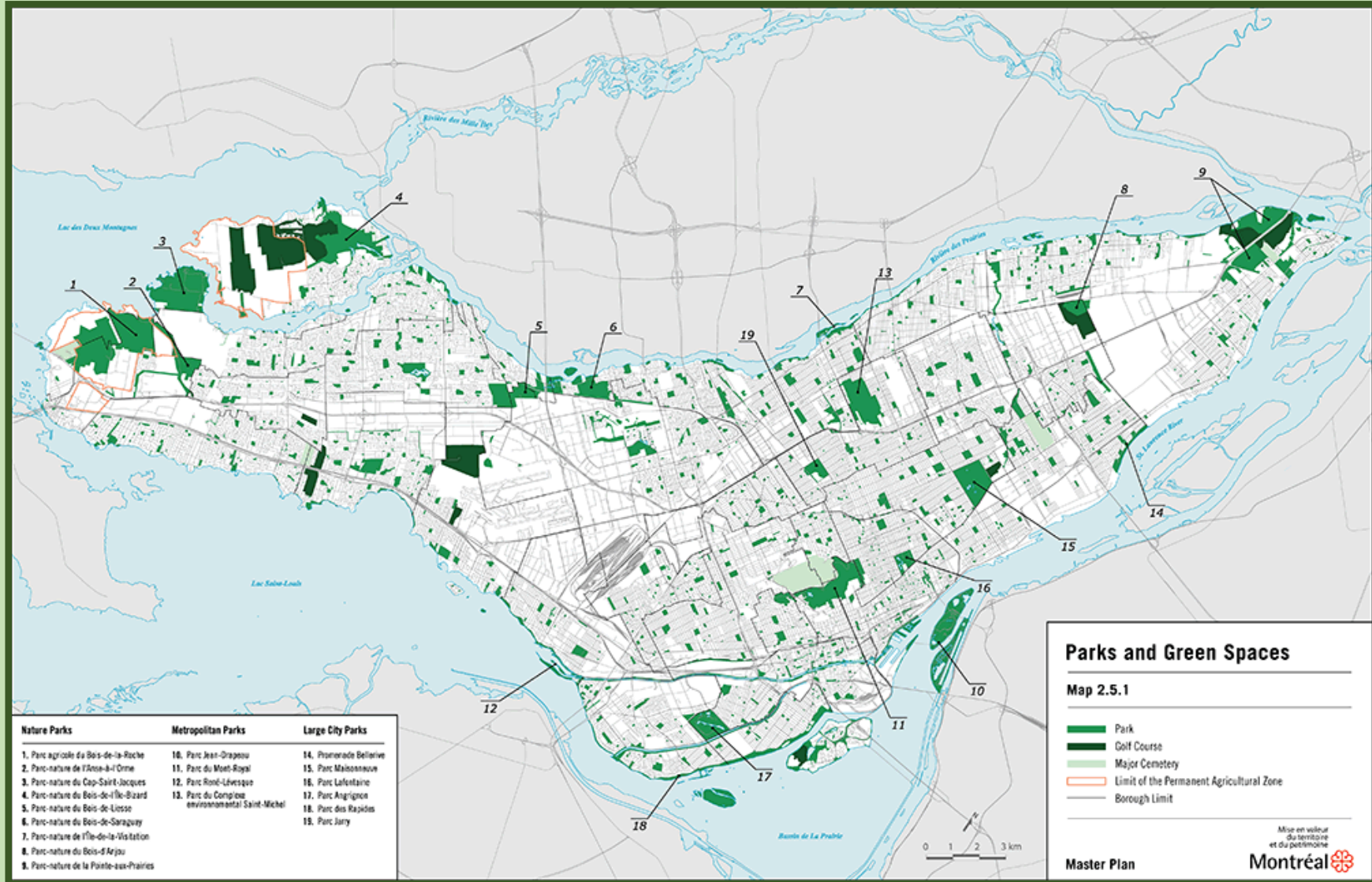
*Water is Life*

© ARTCO.



# ISLAND of MONTRAL GREEN SPACE MAP

[http://ville.montreal.qc.ca/pls/portal/docs/page/plan\\_urbanisme\\_fr/MEDIA/IMAGES/PUBLIC/2\\_5\\_1\\_en.gif](http://ville.montreal.qc.ca/pls/portal/docs/page/plan_urbanisme_fr/MEDIA/IMAGES/PUBLIC/2_5_1_en.gif)



4% to a promise of 10% = in SURFACE AREA (2D) – ECOSYSTEMS are (3D)  
Therefore LOSSES of 90+% x squared (3D)



## ENVIRONMENTAL BENEFITS of TREES as they GROW

Example: SUGAR MAPLE '*Acer saccharum*' <http://www.treebenefits.com/calculator/>

Diameter in inches	CO2 sequestered In pounds	STORM WATER intercepted In GALLONS	KW HOURS
2	27	74	4
4	89	356	13
8	195	663	37
16	502	1,763	98
32	1,011	4,626	163
48	1,461	7,694	213

# ORIGINAL TERRITORIES



# 17 RESERVES in QUEBEC



**ORIGINAL 'TURTLE ISLAND'  
(North American)  
IROQUOIAN TRADE ROUTES:**

**1,000 kilometer radius**

- **West to the great Lakes**
- **North to James Bay**
- **East to the Maritimes**
- **South to the Carolinas**





**ORIGINAL 'TURTLE ISLAND'**  
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**IROQUOIAN TRADE ROUTES:**

- 1,000 kilometer radius**
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  - North to James Bay
  - East to the Maritimes
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St Pierre River at the 



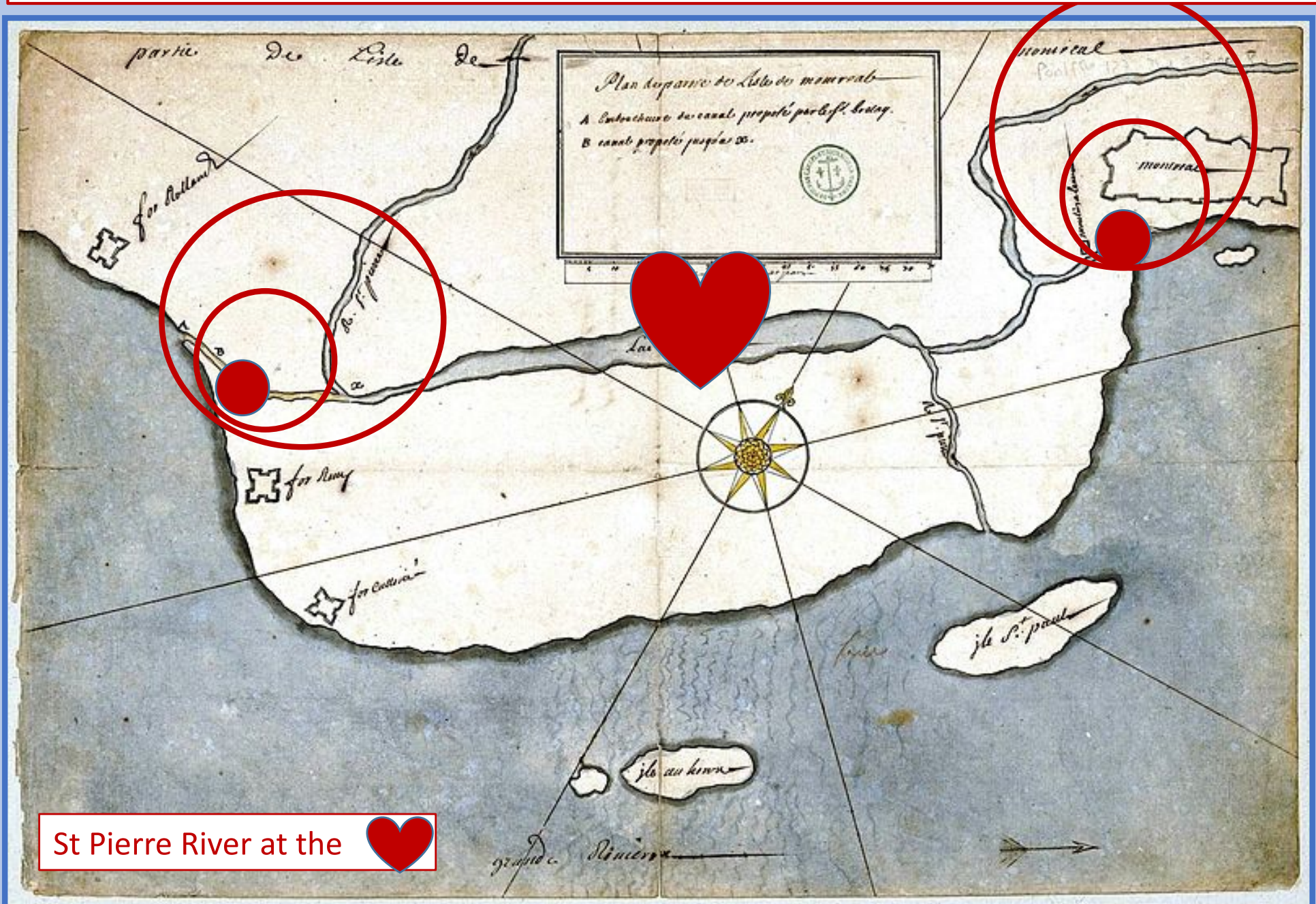


# HISTORICAL SIMULTANEOUS DEVELOPMENT of the 2 POLES VILLE MARIE & LACHINE





**HISTORICAL SIMULTANEOUS DEVELOPMENT of the 2 POLES  
REGIME FRANCAISE – FUR TRADE – INDUSTRIAL PERIOD of LACHINE CANAL**



St Pierre River at the 

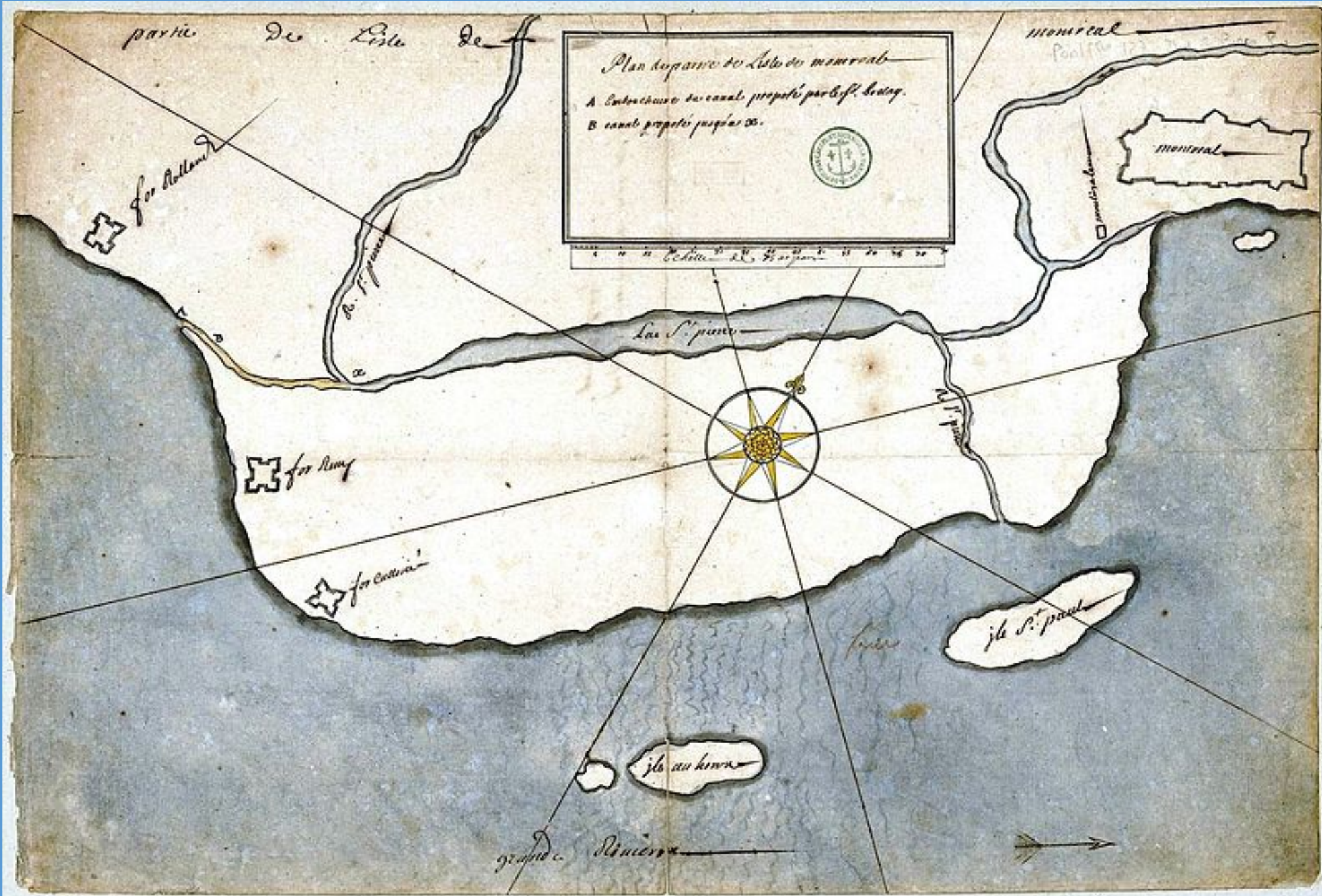


**Sous Turcot, un ancien lac pose un défi aux ingénieurs,** Radio Canada, Publié le vendredi 21 avril 2017

<https://ici.radio-canada.ca/nouvelle/1028997/sous-turcot-ancien-lac-complique-travail-ingenieurs-st-pierre-loutre-construction-nouvel-echangeur-defis>







partie de l'Isle de

Plan de la partie de l'Isle de Montreal  
A Entrée du canal proposé par le Sr. Leveque  
B canal proposé par le Sr. de la Riviere

Montreal

Fort Holland

Fort Remy

Fort Cassin

La Riviere

Isle St. Paul

Isle au Haron

Grand Riviere

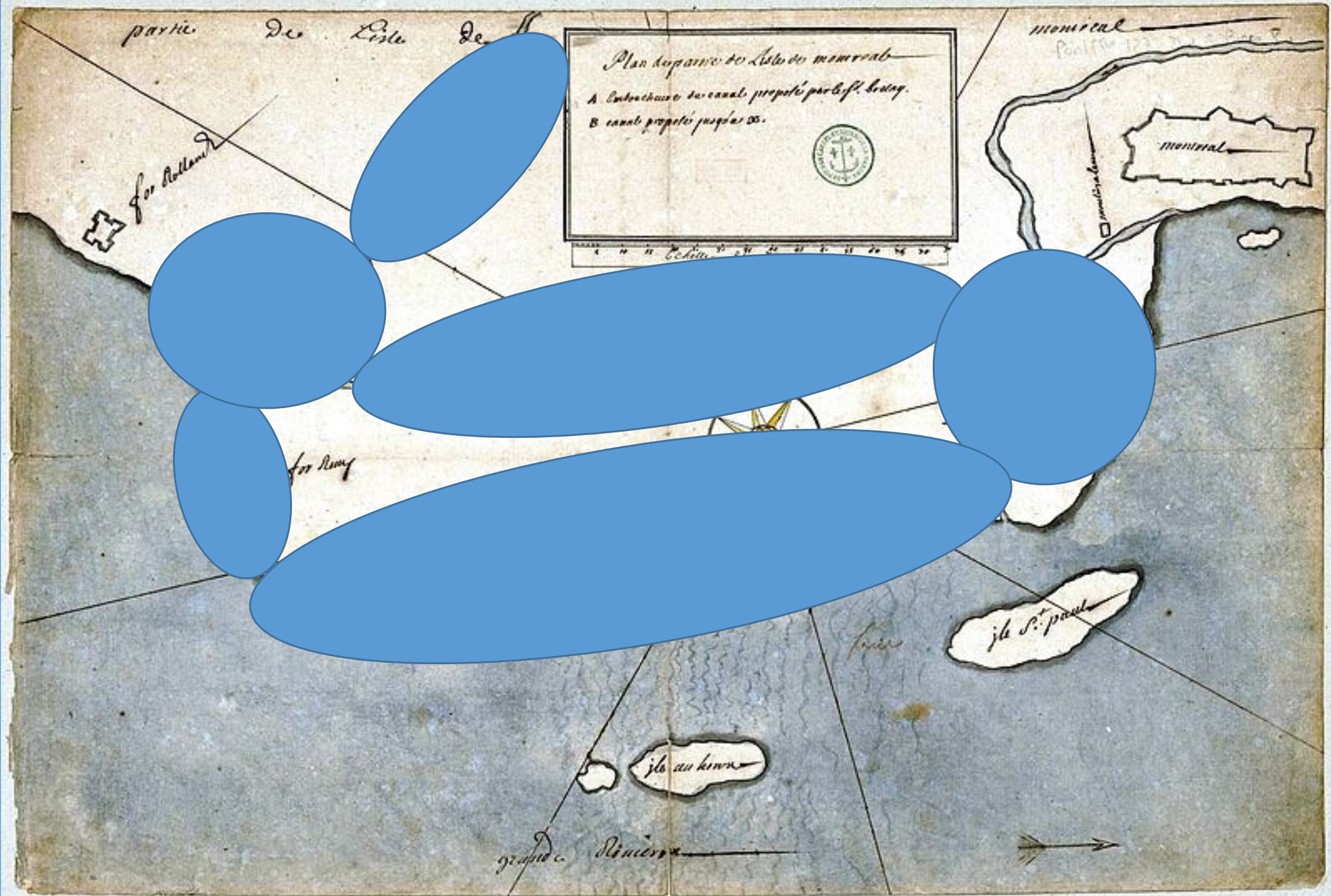


Scale bar with markings from 0 to 30, labeled 'Lignes'.





# St PIERRE RIVER WATERSHED & FLOOD ZONES





**PERPETUAL FLOODING** through the growth of the city.

We have a **COLLECTIVE AMNESIA** another thing I wish to bring to the surface of our memories and future actions



<http://ocpm.qc.ca/fr/consultation-publique/voies-dacces-au-parc-mont-royal>

## INNONDATION / FLOOD : Maison st GABRIEL 1818



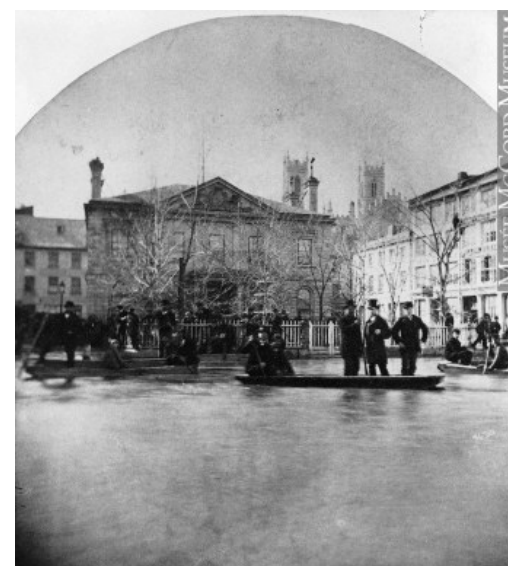
*Roadside Cross*

En Nouvelle-France, les croix de chemin symbolisent la prise de possession du territoire et témoignent de la foi des habitants. Cette croix fut élevée en 1818 à la suite d'une promesse : **menacées par l'inondation**, les sœurs fermières promettent de faire élever une croix si les pluies diminuent. Elle rappelle la passion du Christ : la lance symbolise sa mort, le soleil rayonnant, entourant le centre, rappelle que vers trois heures de l'après-midi, l'astre solaire s'est obscurci, et l'échelle évoque la descente de son corps. Il s'agit de la croix de chemin la plus ancienne de Montréal et du corpus québécois le plus ancien

obscurci, et l'échelle évoque la descente de son corps. Il s'agit de la croix de chemin la plus ancienne de Montréal et du corpus québécois le plus ancien.

*In New France, roadside crosses symbolized taking possession of the territory and stood witness to the faith of the settlers. This cross was erected in 1818 following a promise. **Threatened with flooding**, he farming sisters promised to erect a cross if the rain stopped. It recalls the passion of Christ: the lance symbolizes His death; the sun, surrounding the centre, reminds us that the sky went dark at about 3:00 p.m.; and the ladder evokes the descent of His body. This is the oldest roadside cross in Montreal and the oldest in the Quebec repertory of such crosses.*





Inondation de la place Royale, Montréal, QC, **1869**

Inondation, rue Saint-Paul, Montréal, QC, **1869**

Vue en direction est vers la Douane, rue Foundling, Montréal, QC, vers **1869**, copie réalisée vers 1895



# Inondations et débâcles à Montréal en photos, 1865-1888

Publié par [VICKY LAPOINTE](#) le [JANVIER 14, 2012](#)

<https://tolkien2008.wordpress.com/2012/01/14/inondations-et-debacles-a-montreal-en-photos-1865-1888/>



édifice de la Royal Insurance Company **1865**

La  
Commission  
du Havre

from insurance to  
custom house to  
Musée Pointe-à-Callière





# Rue de l'Eglise, Verdun 1904



**Inondation de la propriété Asylum**, vue vers le Nord-Ouest. **12 avril 1922**. Archives de la Ville de Montréal.

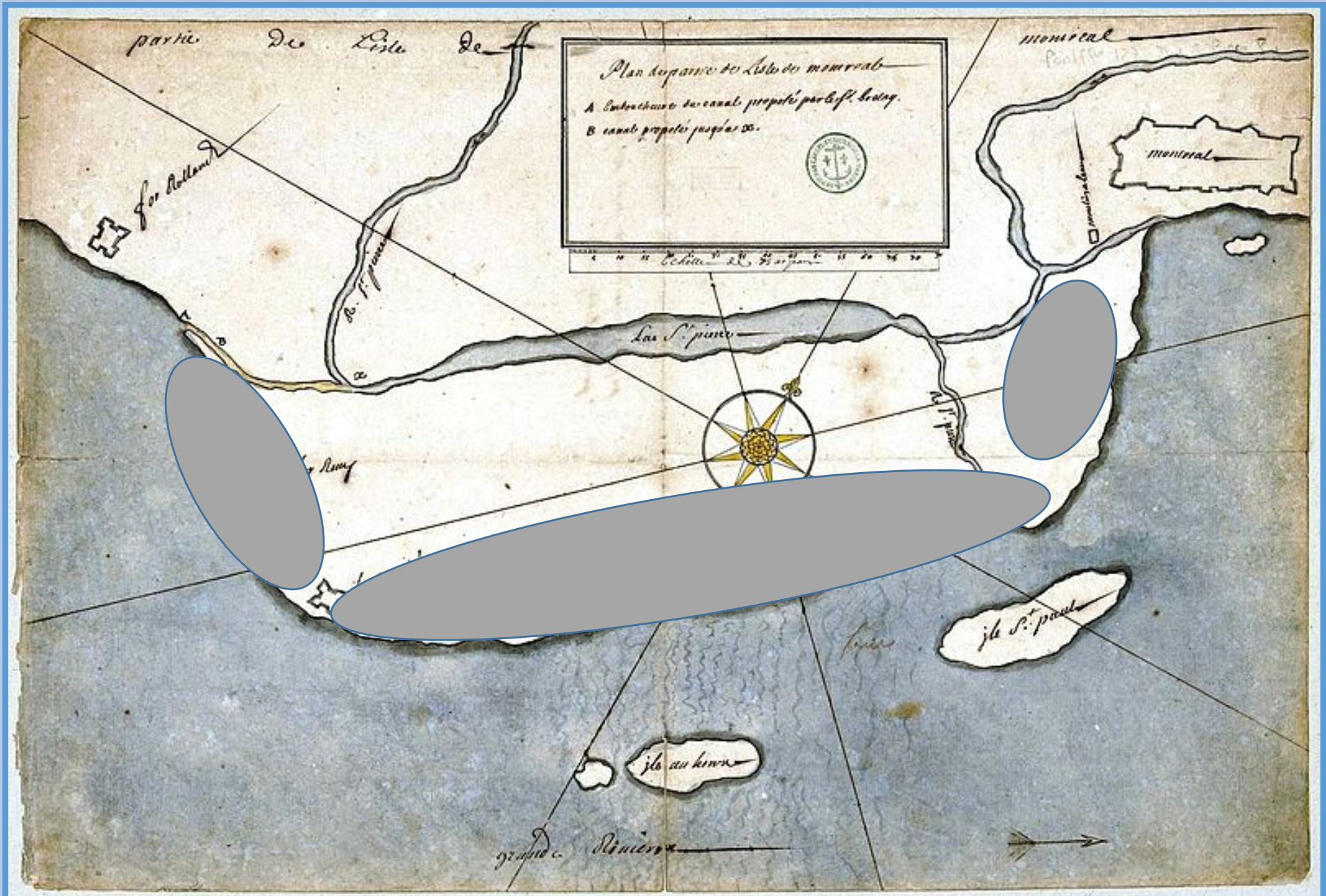
VM117-Y-1P1321. <https://www.facebook.com/ArchivesMontreal/photos/pcb.10154524443849543/10154524438209543/?type=3&theater>

The Protestant Asylum opened in 1890 till 1965 when it was changed to the **Douglas Hospital**





**SHORELINES** which have been landfilled by the LARGE INFRASTRUCTURE PROJECTS:  
**Lachine Canal – AQUADUCT – ST LAWRENCE SEAWAY**





# MÉTAMORPHOSE DE LA COUR TURCOT 10 éléments à connaître sur le projet du nouveau parc-nature Août 2018

[http://ocpm.qc.ca/sites/ocpm.qc.ca/files/pdf/P98/3.1\\_par-nature\\_courturcot.pdf](http://ocpm.qc.ca/sites/ocpm.qc.ca/files/pdf/P98/3.1_par-nature_courturcot.pdf) page 2



Aerial photos like these are deceiving. The area appears enormous .  
The area allotted for a Nature Park is only **30 ha**



## URBAN vs NATURE PARKS

Table 1: Municipal Park comparisons

Parc Rene Levesque	14 ha
Park Turcot	30 ha
Parc Nature Ile de la Visitation	32 ha
Parc Lafontaine	34 ha
Parc Jarry	35 ha

Table 2: Nature & Grand Parc comparaisons

		x-c ski	Snow shoe	walk	TOTAL
Parc Nature Turcot	30 ha				
Golf Meadowbrook	57 ha				
GM 'Bottom 9' Lachine sector	23 ha				
GM 'Top 9' st Luc sector	34 ha				
Grand Parc Angrignon	97 ha	10.4 km	2.7 km	?	13.1 + kms
Parc Nature Bois de Liesse	159 ha	17 km	9.6 km	4 km	30.6 kms
Parc Nature Mont Royal	200 ha	16.2 km	3 km	8.3 km	27.5 kms
Morgan Arboretum forested reserve	245 ha	14.6 km	7 km	3 km	24.6 + kms
Parc Nature Cap st Jacques	316 ha	28 km	5 km	7 km	40 kms

## URBAN PARK (2D) vs NATURE PARK (3D)



**JARRY PARK**

[https://en.wikipedia.org/wiki/Jarry\\_Park\\_Stadium#/media/File:Jarry\\_Park\\_Montreal\\_1971.jpg](https://en.wikipedia.org/wiki/Jarry_Park_Stadium#/media/File:Jarry_Park_Montreal_1971.jpg)



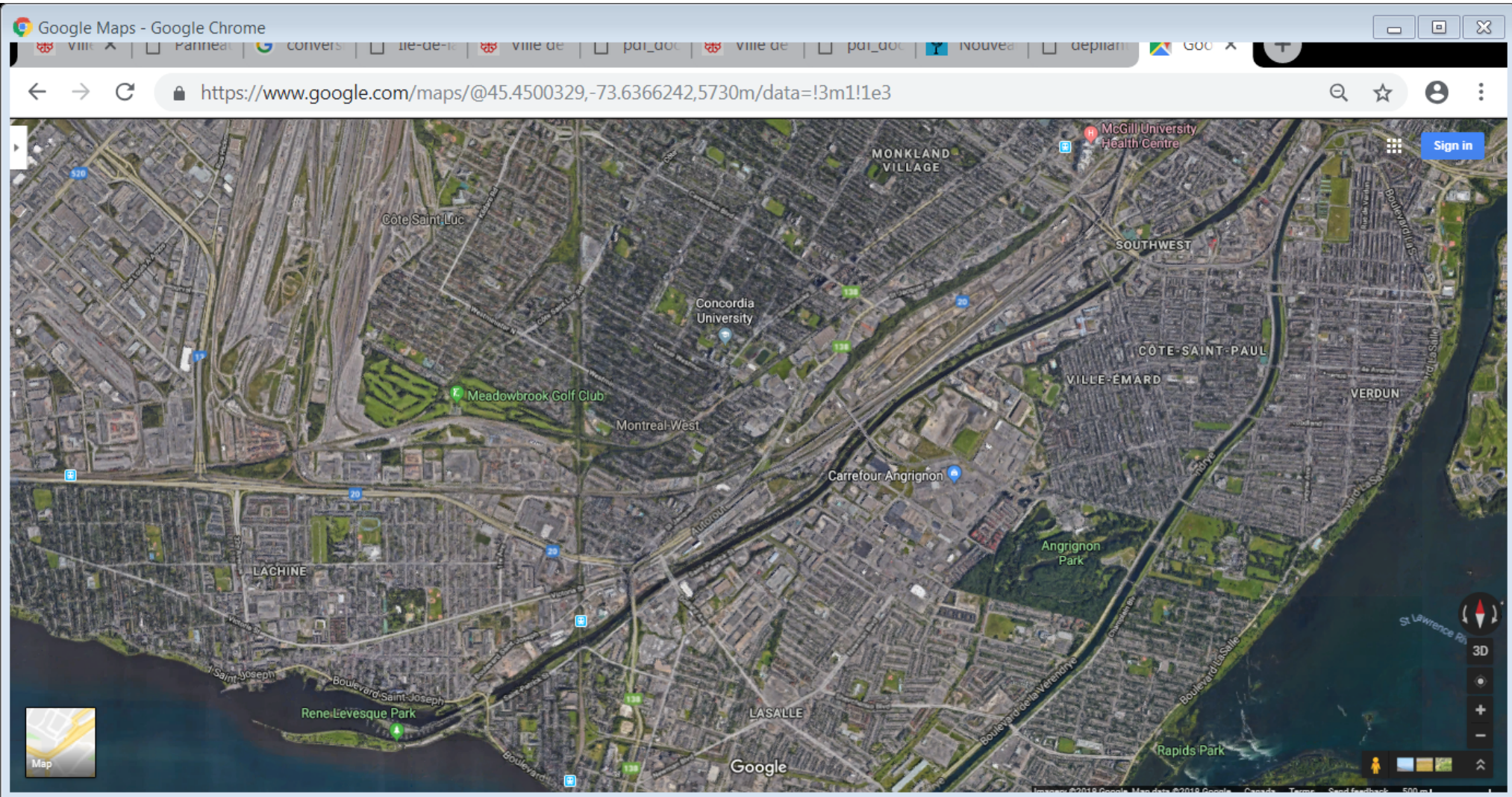
**BOIS de LIESSE**

[https://www.tripadvisor.ca/LocationPhotoDirectLink-g155032-d155263-i116477447-Bois de Liesse Nature Park-Montreal Quebec.html](https://www.tripadvisor.ca/LocationPhotoDirectLink-g155032-d155263-i116477447-Bois_de_Liesse_Nature_Park-Montreal_Quebec.html)



# Topographical MAP of the South West of the Island of MONTREAL

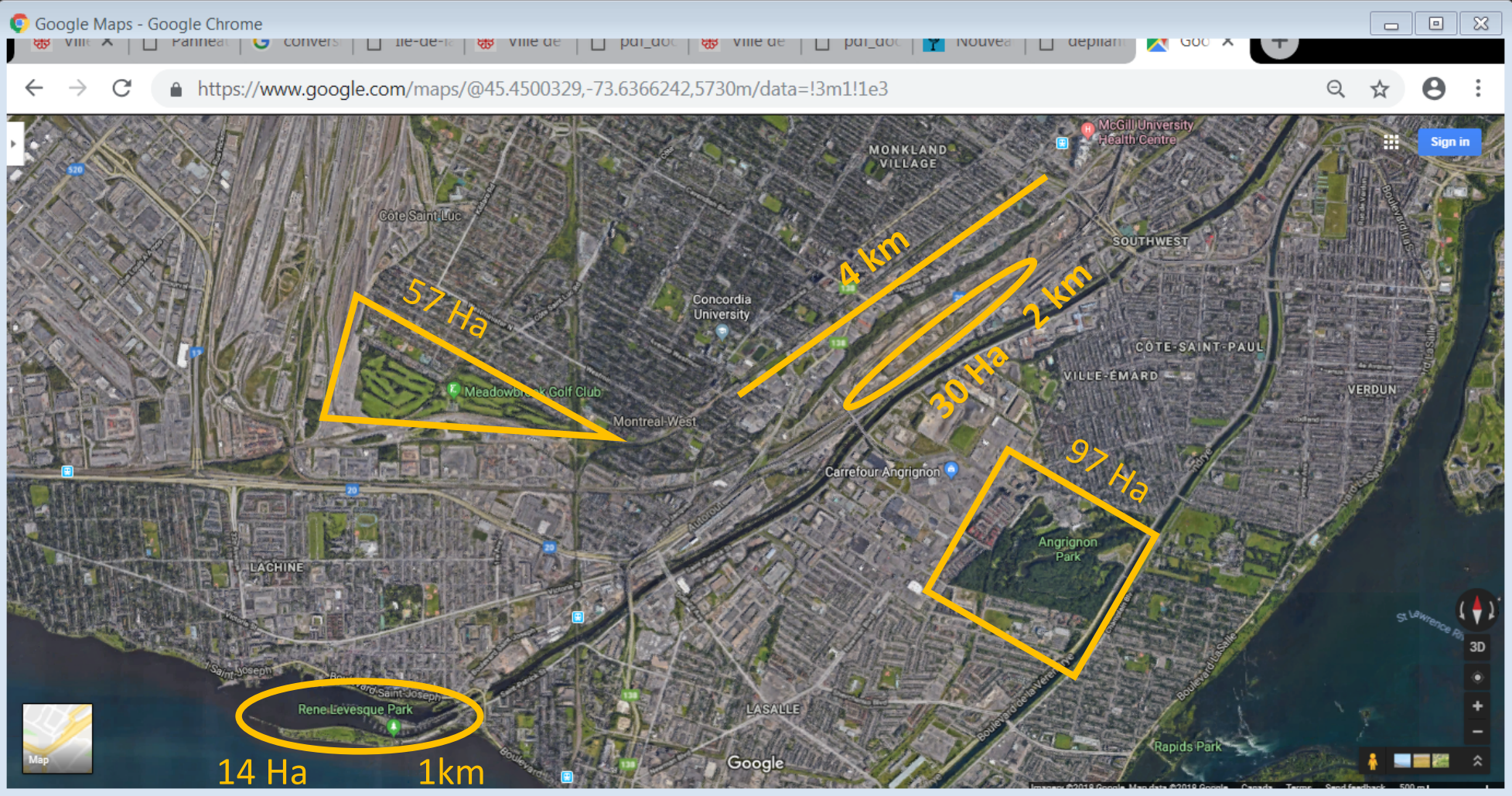
<https://www.google.com/maps/@45.4500329,-73.6366242,5730m/data=!3m1!1e3>





# DIMENSION COMPARISON of ADJACENT GREEN SPACES

<https://www.google.com/maps/@45.4500329,-73.6366242,5730m/data=!3m1!1e3>

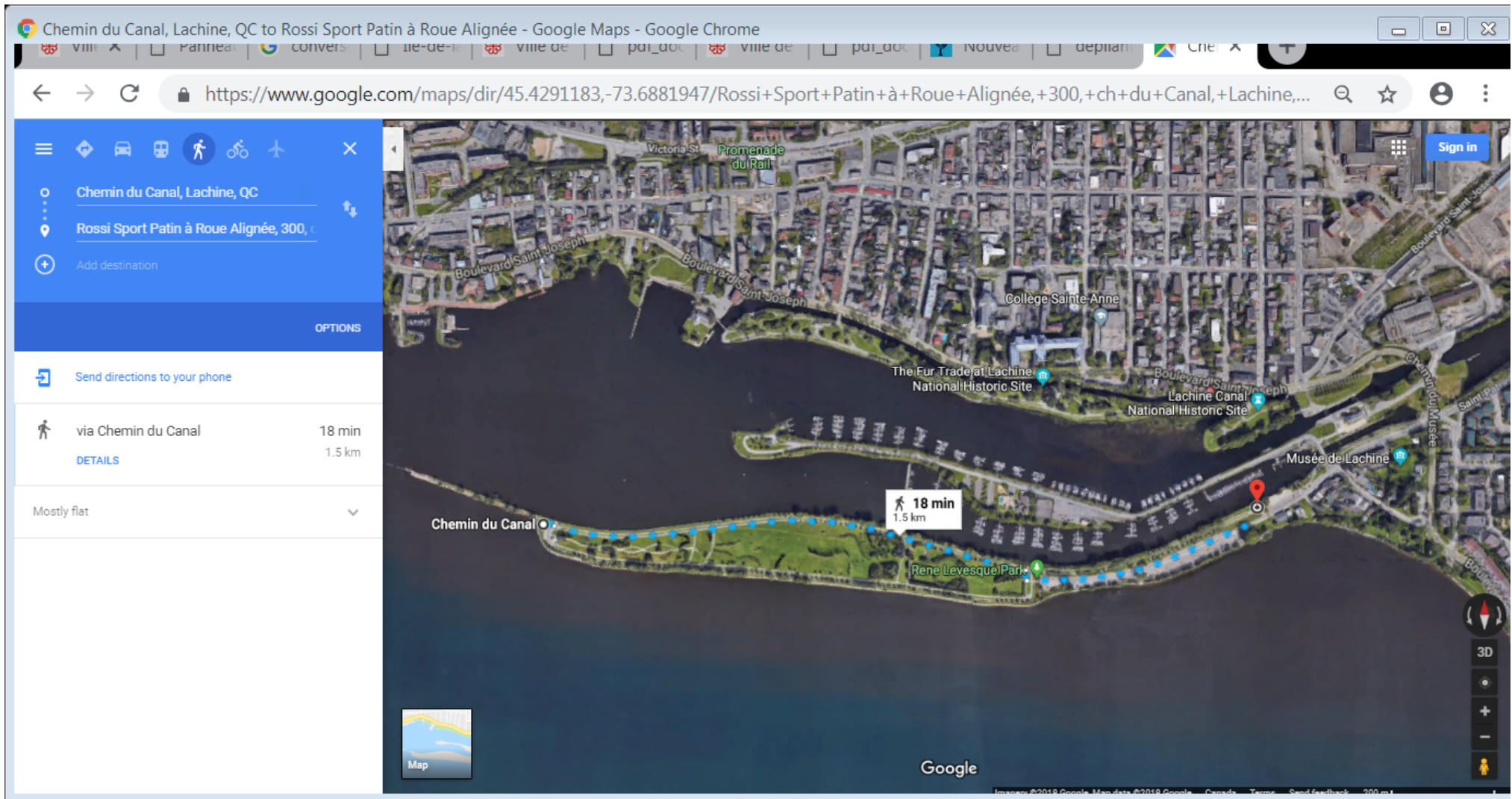


Parc Rene Levesque – Meadowbrook – Falaise St Jacques – Turcot Yards – Parc Angrignon



# Rossi Sports to western point = 1.5 kilometers

<https://www.google.com/maps/dir/45.4291183,-73.6881947/Rossi+Sport+Patin+%C3%A0+Roue+Align%C3%A9e,+300,+ch+du+Canal,+Lachine,+QC+H8S+4G2/@45.4302627,-73.682702,1322m/data=!3m1!1e3!4m9!4m8!1m0!1m5!1m1!1s0x4cc916becad26e63:0xf9f2d180e83297af!2m2!1d-73.6703869!2d45.4294147!3e2>



# Parc René-Lévesque



Ouvert entre 6 h et 23 h  
Renseignements : ☎ 311

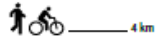
Tout individu est tenu de respecter l'ensemble des règlements municipaux sous peine d'amende.  
Pour connaître les détails : [ville.montreal.qc.ca/grandsparcs](http://ville.montreal.qc.ca/grandsparcs)

[ville.montreal.qc.ca/grandsparcs](http://ville.montreal.qc.ca/grandsparcs)  
[museedelachine.com](http://museedelachine.com)



## Jardin de sculptures du Musée plein air de Lachine - site parc René-Lévesque

- |   |   |   |   |
|---|---|---|---|
| David MOORE, <i>Statuerstude</i> , 1994                     | André FOURNELLE, <i>La Ville blanche</i> , 1986                 | Pierre LEBLANC, <i>Signal pour Takis</i> , 1986     | Hugh LEROY, <i>Colonne à quatre éléments</i> , 1967   |
| Bill (William) VAZAN, <i>Story Rock</i> , 1986              | Mark PRENT, <i>Eglinor</i> , 1994                               | Gilles BOISVERT, <i>Mre-au-vent</i> , 1988          | Takara NARITA, <i>From A</i> , 1986                   |
| Dominique ROLLAND, <i>Le Déjeuner sur l'herbe</i> , 1994-97 | Michel GOULET, <i>Entour : le grand jardin</i> , 1994           | Guy NADÉAU, <i>Les Voûtes d'Ulysse</i> , 1992       | Robert ROUSSIL, <i>Hommage à René Lévesque</i> , 1988 |
| Octavian CLARUL, <i>Écluses</i> , 1988                      | Catherine WIGDERY, <i>The Passing Song</i> , 1992               | Jean-Pierre MORIN, <i>La Plume et le feu</i> , 1985 | Dominique ROLLAND, <i>La Phare d'Arctimède</i> , 1986 |
| Bill (William) VAZAN, <i>Vertant #</i> , 2009               | Jean-Marie DELAWALLE, <i>Chêne Wolf</i> , 1988                  | Graham CARTIER, <i>Hermès</i> , 1986                |   |
| Miroslav MALER, <i>Cheval à plume</i> , 1988                | Pierre LEBLANC, <i>Souvenir de 1935 au 2025 Roberval</i> , 1992 | Dominique VALADÉ, <i>Les Carantides</i> , 1988      |   |



Rivière Saint-Laurent

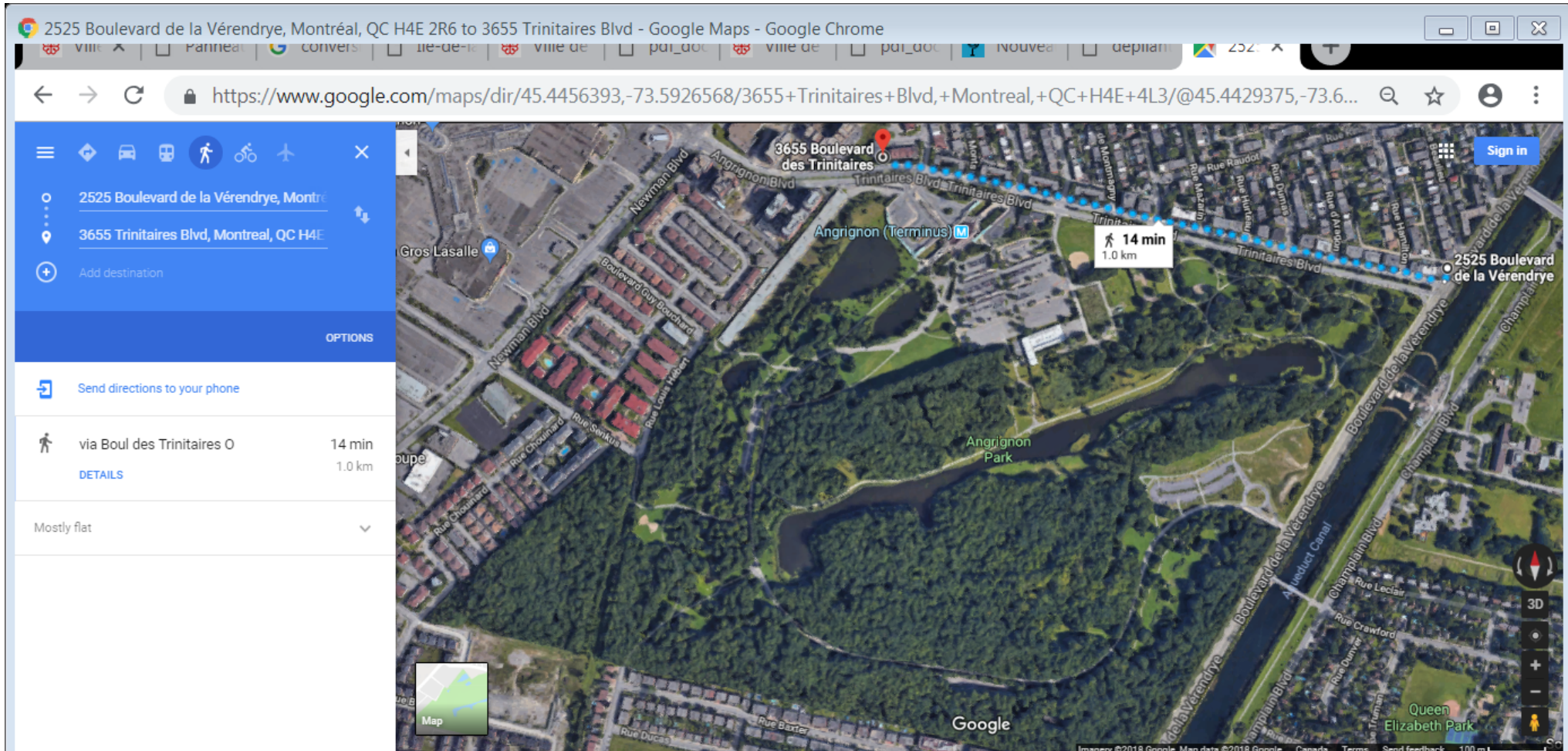
Montréal 

Parc Rene-Levesque 140,000 sq meters = 14 Hectares  
2 km long = 4km Bike & walk  
Main area of PARK is 1 km long x2 = circumference  
Parking +/- 0.5 km long



# ANGRIGNON PARK 1 KM x 1 Km square

<https://www.google.com/maps/dir/45.4456393,-73.5926568/3655+Trinitaires+Blvd,+Montreal,+QC+H4E+4L3/@45.4429375,-73.6075315,1118m/data=!3m1!1e3!4m9!4m8!1m0!1m5!1m1!1s0x4cc910e15db852ff:0x8d4efee9a64280d2!2m2!1d-73.6054302!2d45.4473721!3e2>



# PARC ANGRIGNON

97 Hectares

Lac: 1 Km long





# PARC NATURE dans la Cour TURCOT yard NATURE PARK

## MÉTAMORPHOSE DE LA COUR TURCOT 10 éléments à connaître sur le projet du nouveau parc-nature Août 2018

[http://ocpm.qc.ca/sites/ocpm.qc.ca/files/pdf/P98/3.1\\_par-nature\\_courturcot.pdf](http://ocpm.qc.ca/sites/ocpm.qc.ca/files/pdf/P98/3.1_par-nature_courturcot.pdf) page 1

[ocpm.qc.ca/par-nature](http://ocpm.qc.ca/par-nature)

[ocpm.qc.ca](http://ocpm.qc.ca)

### Plan proposé



# SCALE PARK COMPARISONS

Parc Rene Levesque



Parc Turcot



Angrignon Lake

Parc Angrignon



## PROPOSED NATURE PARK DESIGN

**SIZE AVAILABILITY for each of the 3 ZONES - if equally distributed :**

### CHOICE 1

- ✓ 33% = 10 Ha FOREST
- ✓ 33% = 10 Ha AQUATIC
- ✓ 33% = 10 Ha Wild FLOWER FIELD

---

30 Hectares (75%)

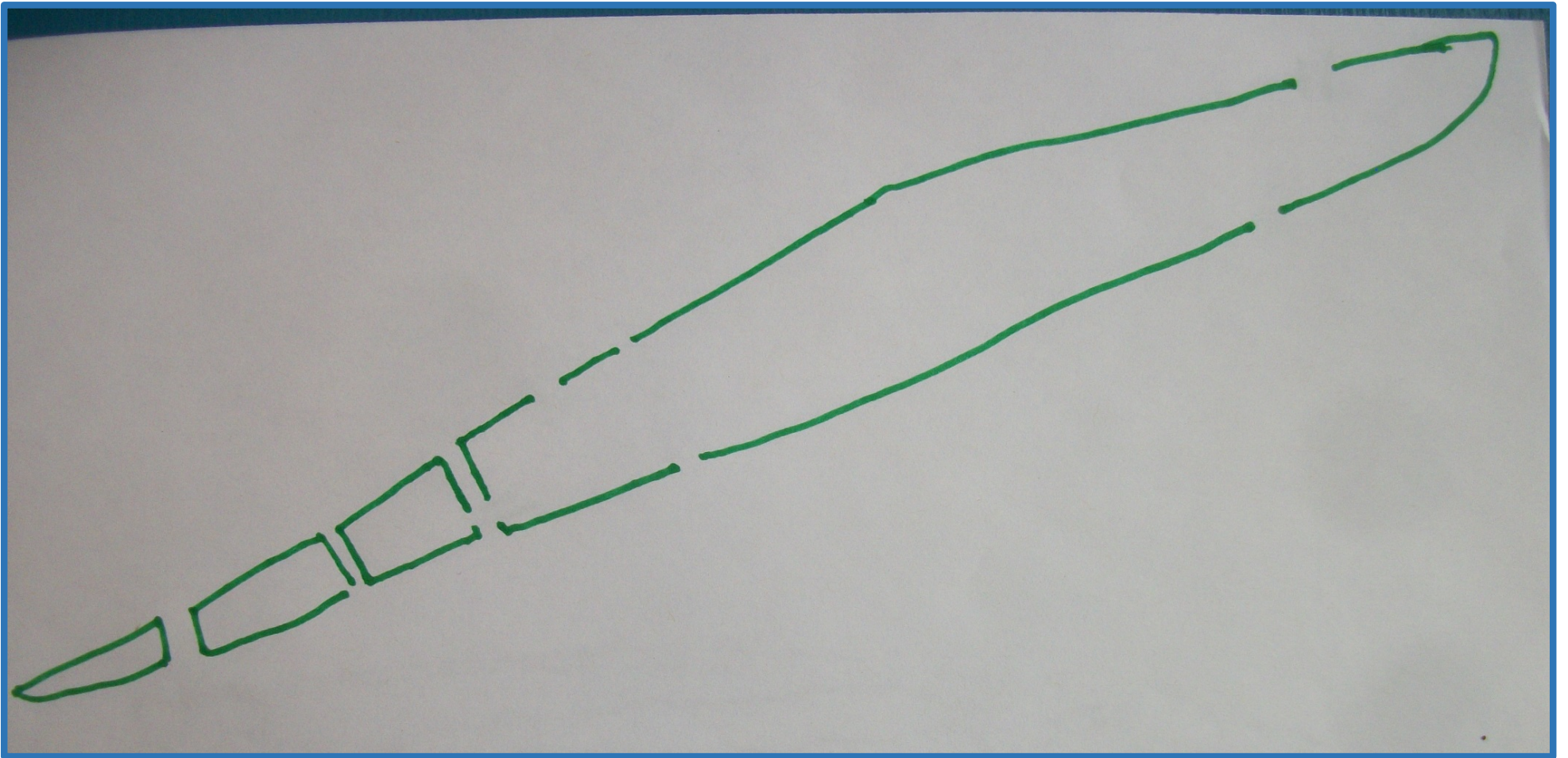
### CHOICE 2 (equivalent of)

- |                        |       |
|------------------------|-------|
| 1 Rene Levesque Park   | 14Ha  |
| 1 Agrignon Lake        | 10 Ha |
| 1 Rene Levesque Park   | 14 Ha |
| Bike and walking paths | 5 Ha  |

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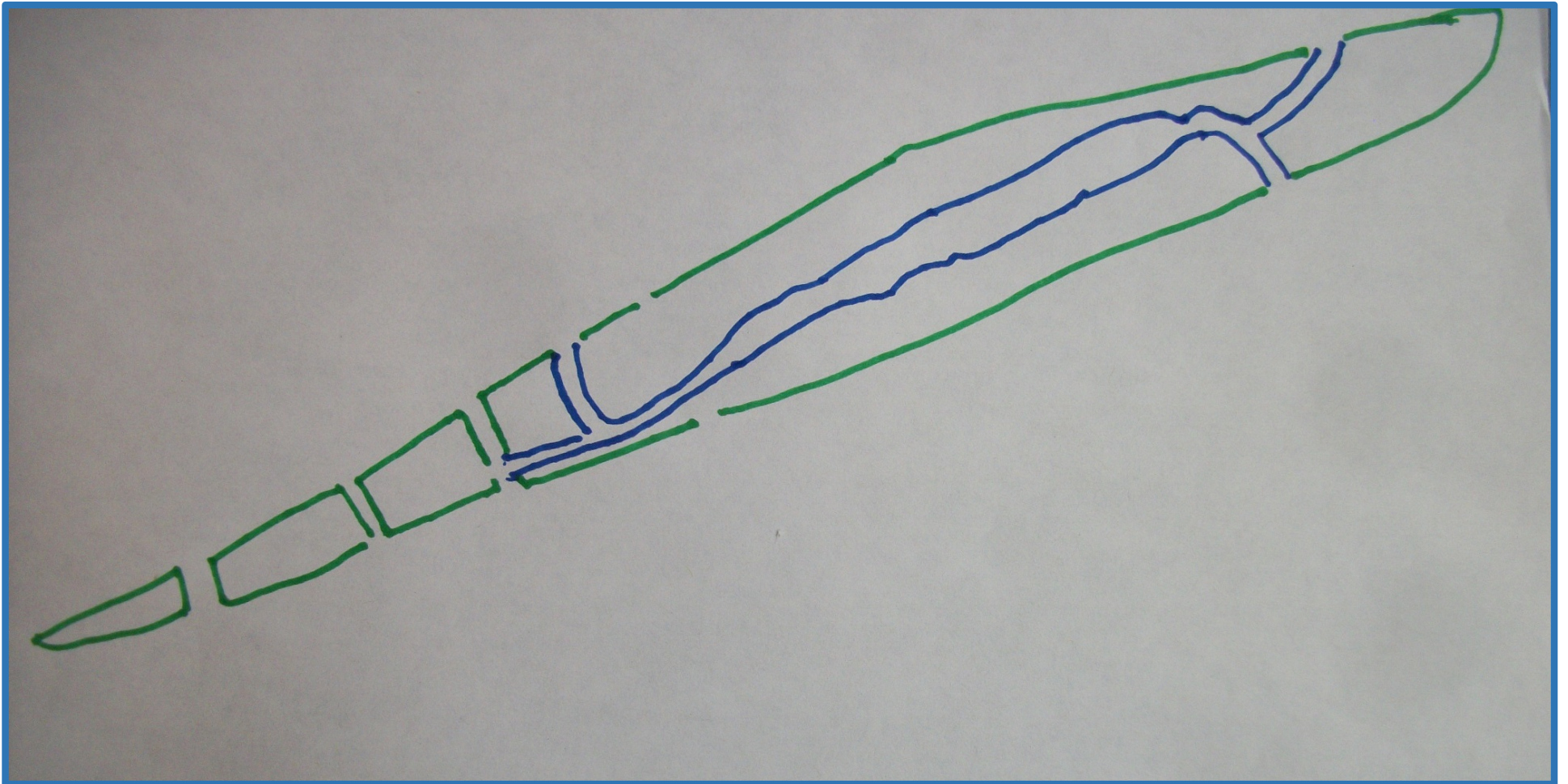
43 Hectares (100%)

# PROPOSED NATURE PARK DESIGN





**PROPOSED NATURE PARK DESIGN :**  
**ADDING SCALE REPLICA OF ORIGINAL OTTER LAKE**



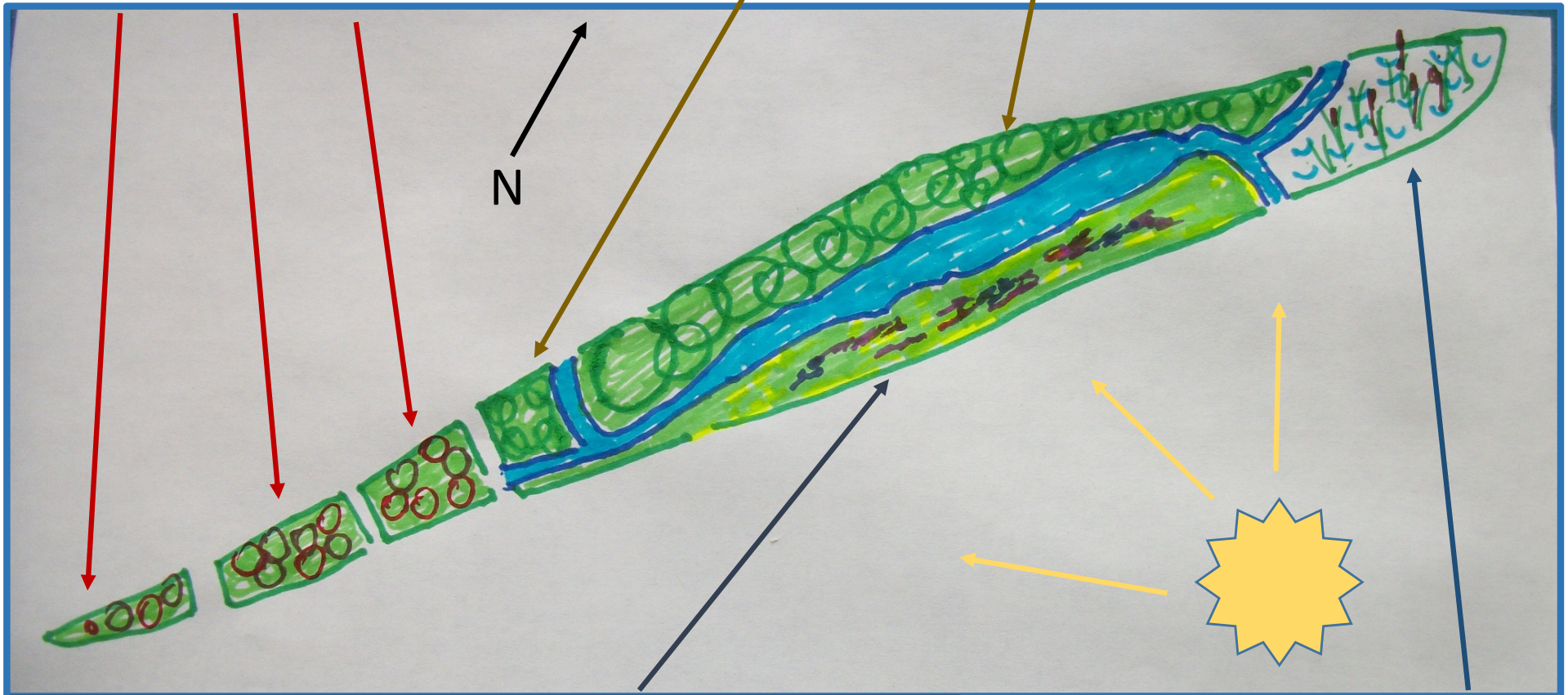


# PROPOSED DESIGN : FIELD, FORESTS & WATER MANAGEMENT Areas added

## Food FOREST REPRESENTING FIRST NATIONS' DIET:

**Cherries**, black walnut, bitternut hickories, etc... spring flowers aid pollinators

**Dense Hardwood Forest in the North** to serve as a wind break & buffer from CP & 20



## Wild FLOWER FIELD in the Sunny SOUTH (3 seasons):

- Dandelions for bees in spring, daisies, etc,,, in the summer
- Asters, Golden rod in fall

## RAIN WATER MANAGEMENT Education area TO PREVENT COLLECTIVE AMNESIA

(symbolized with cattails)