Submission to the OCPM

for

La Dalle Parc – La Falaise Saint Jacques – Le Parc Turcot

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November 2018

Introduction

The following submission is divided into two segments. The first is called the Overview and is outside the specific scope of this OCPM. But it sets the framework for recommendations regarding the Dalle Parc-Falaise St Jacques-Parc Turcot. It is our belief that having recommendations seen in a larger frame of reference will allow the new parklands to act as a catalyst for beneficial urban redevelopment across Montreal through time.

This submission brief is being translated into French. Unfortunately time constraints did not allow for completion of that task, our apologies.

What is being presented here is a holistic vision of how the city might evolve through the first half of the 21st century. All the parts are necessary. In other words the Dalle Parc, the Falaise St Jacques, and the Parc Turcot are parts of a whole concept.

This holistic concept should be seen as a new way of planning the city. It will have spin-off effects in making Montreal a pole of global attraction for new enterprises.

The Atelier Ry Arp / Ry Arp Studio is a design workshop committed to finding 21st century urban solutions. Its founder, Roger Jochym, is a member of environmental groups, one of which is Sauvons La Falaise, as well as active transport associations.

Contents

Overview

The Dalle Parc-Falaise St Jacques-Parc Turcot as new additions to the natural patrimony (nature bank) of the island of Montreal should be seen in a larger frame of reference.

A.1] Paradigm Shift

Beginning in Copenhagen, Amsterdam, Oslo, Paris, and Barcelona and now spreading to cities throughout the world is the idea of shifting the dominant paradigm of urban design from that of intense vehicular domination of urban spaces to that of vehicles being subordinate to active transport and public transit. To put it more succinctly, vehicular traffic should move to third place from its present first place dominance, active transport should move to second from third, and public transit should assume first place in the hierarchy of modal share. Public transit must become omnipresent and intelligent. There must be a wide variety of options, the transit cocktail, which is integrated into one intelligent platform that can be accessed by mobile devices. Consideration should even be given to making this integrated public transit system a basic service in Montreal. In other words, it might in time be financed from government coffers rather than user fees.

This paradigm shift is important since it frees large tracts of land that have been given to parking lots, street parking, oversized streets, and other vehicular uses. Some will then directed to densification of the city with housing, some to new institutions required by the larger population, and some to a reintroduction of Nature. This reintroduction will take the form of parks, greenways, storm water retention ponds, reappearance of streams, community gardens, tree-lined walks, and other forms from minor to major scale. It will be vital in reinforcing the liveability of high density neighborhoods.

A.2] Climate Change

Humanity is on the brink of damaging climate change accelerating into widespread catastrophe. A major factor in reversing this scenario will be well designed cities. They will require high density living and a sustainable life style. But this does not mean that life become more Spartan. These changes can actually foster a more vibrant culture that offers innumerable options and that supports more creativity. It will re-appropriate urban spaces to human scale liveability and bring Nature close to everyone.

All this is in opposition to the suburbs which actually drive climate change. Their absolute dependence on vehicles for transport to all functions, the distances involved in any travel, the size and configuration of their housing, the tremendous cost of infrastructure for services make them leaders in driving climate change. A comparison with the city is shocking. For example Manhasset, a suburb of New York City, shows an average footprint that is double that of New York City. The emissions due to transport are four times that of the city center. Similarly larger houses mean 2.5 times more emissions than the houses in the city center. [i] The idea of developing stand alone housing on plots of land spread

out over the countryside must leave the planning vocabulary of the 21st century if society is to have any chance in reversing climate change.

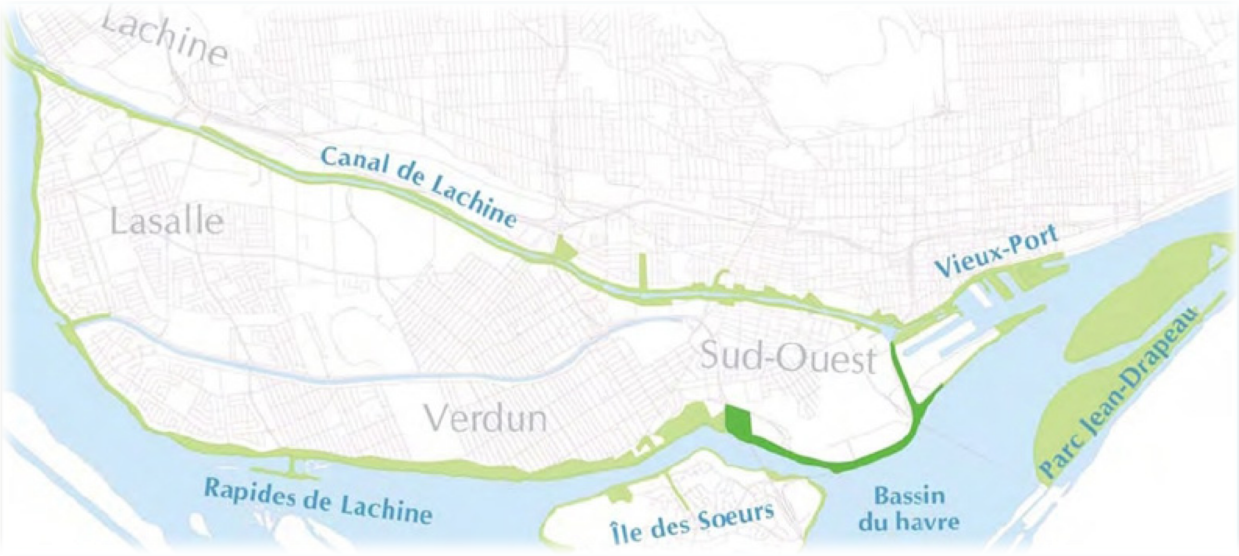
If we do a quick accounting of the public monies being spent in favour of the suburbs it is quite shocking. The new Champlain Bridge will cost $4.2 billion; the rebuild of the Turcot interchange is projected to cost $3.7 billion; the REM $6.0 billion. That is nearly $14 billion being spent to disperse the city into the suburbs. That will mean an ever greater proportion of the metropolitan area of Montreal will be dependent on private vehicles for virtually all their needs, loss of significant acreage of some of the best agricultural land, flight of tax dollars of many well paying jobs away from Montreal, and the dissolution of the vibrant cultural environment for which Montreal is internationally known. And it will mean a continued increase in the number of cars coming onto the island of Montreal every day for jobs, education, and other pursuits. It is the vehicular transport to the suburbs and within the suburbs that is the major sector producing CO2 gases and overuse of energy. Our tax dollars are subsidizing this irrationality.

High density neighborhoods have not received their fair share of public funds for infrastructure. And they have been split apart by suburban expressway infrastructure in their midst. The Dalle Parc-Falaise St Jacques-Parc Turcot project will begin to redress the situation. Social justice requires this shift so that a very unequal spending of public funds is reversed.

A.3] Green Belts to Green Orbs

Some cities of the 20th century have greenbelts as a result of their urban planning. They are basically buffers between the city proper and its suburbs. As such they are far from the inner core of highly dense neighborhoods. Nature is distant. A recent example is that of the newly created Rouge Urban Park on the eastern edge of Toronto. It is a wonderful park but it is not connected to the true city of Toronto. It adjoins Toronto's eastern edge which has the characteristic of a suburb, mostly stand alone houses. It requires a long journey for a city dweller to reach it. This park is not part of their urban experience.

The Dalle Parc-Falaise St Jacques-Parc Turcot can be an important step in altering the green belt concept so that it becomes part of the city fabric, not a buffer belt within the suburbs. It could be part of a net interconnected green orbs, a signature part. In other words it could be a segment in a set of greenways that lead directly into dense urban areas. It would begin to bring all urban citizens into proximity with Nature, within easy walking distance. The important factors would be continuity, a sense of insulation from vehicular dominance, the presence of Nature in its different forms, and active transport pathways.



A nearly complete green orb around the South West – Verdun - Lasalle

It is important that these orbs become through time continuous loops. Because of the diversity of the parts that interconnect to make these orbs, they would be rather irregular in shape. But they would intersect each other, thus providing many directional options. They would be strung together by active transport pathways. These would be for walkers, cyclists, snow shoers, cross country skiers, roller bladders, and even skateboarders. They would be for the human scale, buffered away from the dominance of vehicles. Thus the city would become more human. One of the first nearly complete green orbs in Montreal is the Lachine Canal – St Lawrence Shoreline around Lasalle, Verdun, and the South West. All that is required is a section next to the Bonaventure expressway up to the Victoria Bridge and then a section across to the head of the Lachine Canal.

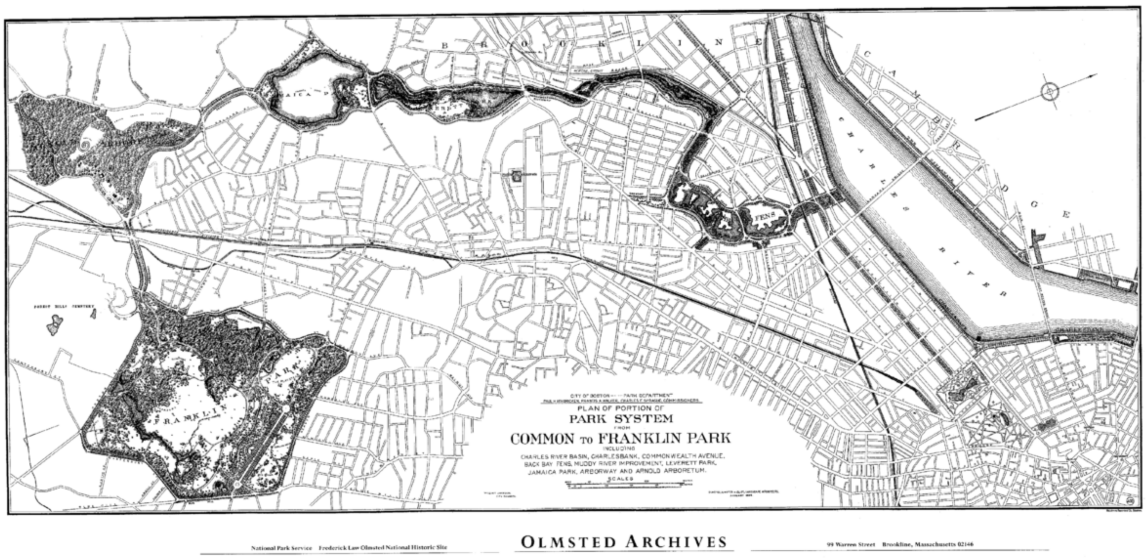
A.4] Benefits

Many benefits will accrue from such green orbs. The value of being near Nature with its flora and fauna is invaluable. The physical and psychological well being of citizens will be reinforced. They will aid in safeguarding the quality of air and water, and will mitigate background sound levels. They will reduce the effect of heat sinks in the city. They will act as pathways for song birds and a bevy of other creatures that enrich our lives.

We should not forget that there are also economic benefits of bringing Nature close to the city dweller. In the 21st century the new economies based on knowledge, such as research, software development, the performing arts, industrial design, film, and animation are attracted to urban areas that have this vital component within their neighborhood. Improvements to the green spaces these past few years in the Mile End district are a case in point. The Mayor of that borough Luc Ferrandez has said that 5 500 new jobs have been created there since 2012, that Ubisoft has remained a strong presence, that companies from around the world have installed themselves, especially from California and England. He asks the question and gives the answer: “Comment y est-on parvenu? En faisant de ce quartier un milieu de vie où les résidents ont envie de travailler, de se divertir, de se nourrir et de se cultiver.” [ii]

A.5] Olmstead and Green Connectivity

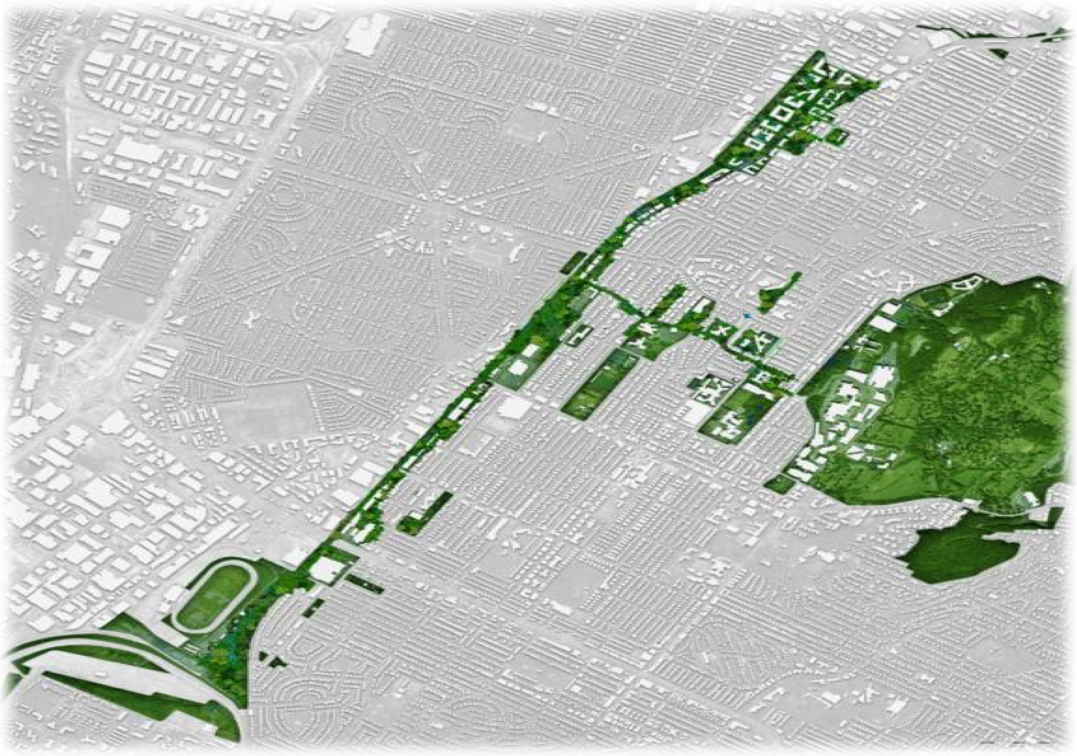
The ideas of urban design including Nature in a continuous manner was advanced by Frederick Law Olmsted, the foremost American landscape designer. He designed our own Parc Mont Royal, and of course Central Park in Manhattan and Prospect Park in Brooklyn. But in Boston and Buffalo he created parks that were interconnected by greenways. In Boston it had the wonderful name of the Emerald Necklace. It was a continuous string of parks connected in an irregular arc that is over 11 kilometers in length.[iii]



The Emerald Necklace of Boston

In Buffalo Olmsted built a parkway system that stretched across the entire city. It connected distant parks. He employed the idea of a tree lined boulevard with adjoining side paths. It was meant for multiple users. This was still in the era of horse drawn carriages. There was a certain formal elegance to this city wide design. Unfortunately with the coming of the car and the 1950s urban mania for expressways, many parts of his green parkway system were converted into expressways. At the present time Buffalo is trying to reacquire these green parkways but the uncontrolled dominance of cars is making this difficult.

What is being proposed with the green orbs is similar to Buffalo's attempt to regain its parkways. There are major differences. One is that rather than attempting to use a formal parkway design that has a boulevard at its centre, the green orbs is a hybrid design that includes many different elements in a continuous manner. One would be the appropriation of certain connecting streets from the dominance of vehicles so that instead Nature and the human scale dominate. The Darlington Project put forward by the Université de Montréal is exemplary.



Darlington Project linking UdeM with its new campus and Hippodrome redevelopment

Appropriation of street space for Nature and the human scale in the Darlington Project

Other elements that could be used in creating green orbs are escarpments, ravines, shorelines, hills, wetlands, grasslands, streams, ponds, lakes, and other natural features. Still other elements might

be manmade such as canals, harbors, docklands, exposition grounds, parks. And for Montreal there would be the added possibility of dedicating certain laneways to this end, perhaps even several parallel laneways at a time.

An important difference from Buffalo's parkway system is that the green orbs rather than being simple linear connections that end at a park, the green orbs would be loops that connect all the elements. They would be continuous. And they would intersect each other, allowing for innumerable possibilities.

A.6] Design Partnership

The proper design of the Dalle Parc-Falaise St Jacques-Parc Turcot requires a partnership of stakeholders into a working group. This should follow the excellent leadership given by 'Le Partenariat du Quartier des spectacles' in the development of the Montreal sector of the same name. It must be emphasized that this was a true partnership wherein each stakeholder came into the group with the intention of creating the best possible outcome, not just defending a particular part of their turf.

Thus 'Le Partenariat du Quartier des spectacles' was not a series of meetings of stakeholders but rather a working partnership of significant contributors. This partnership was essential for its success. And what is very interesting is that today this working partnership continues its design synergy. It aids the Quartier des spectacles to evolve through time.

A.7] Office of the Green Orbs

On a larger scale Montreal needs to establish an Office for Green Orb planning. A wide scope of vision is needed. This office can bring together the disparate elements that will be implicated in making the green orbs a reality through time. And it will take decades to develop.

This office would be the means of communicating ideas, design proposals, methodology, availability of financial resources, construction schedules, budgets, and so on. And the office would be the spokesperson for projecting the Montreal Green Orbs to the world for the sake of attracting new 21st century enterprises. It should be housed within the administration of the City of Montreal.

Dalle Parc – Falaise Saint Jacques – Parc Turcot

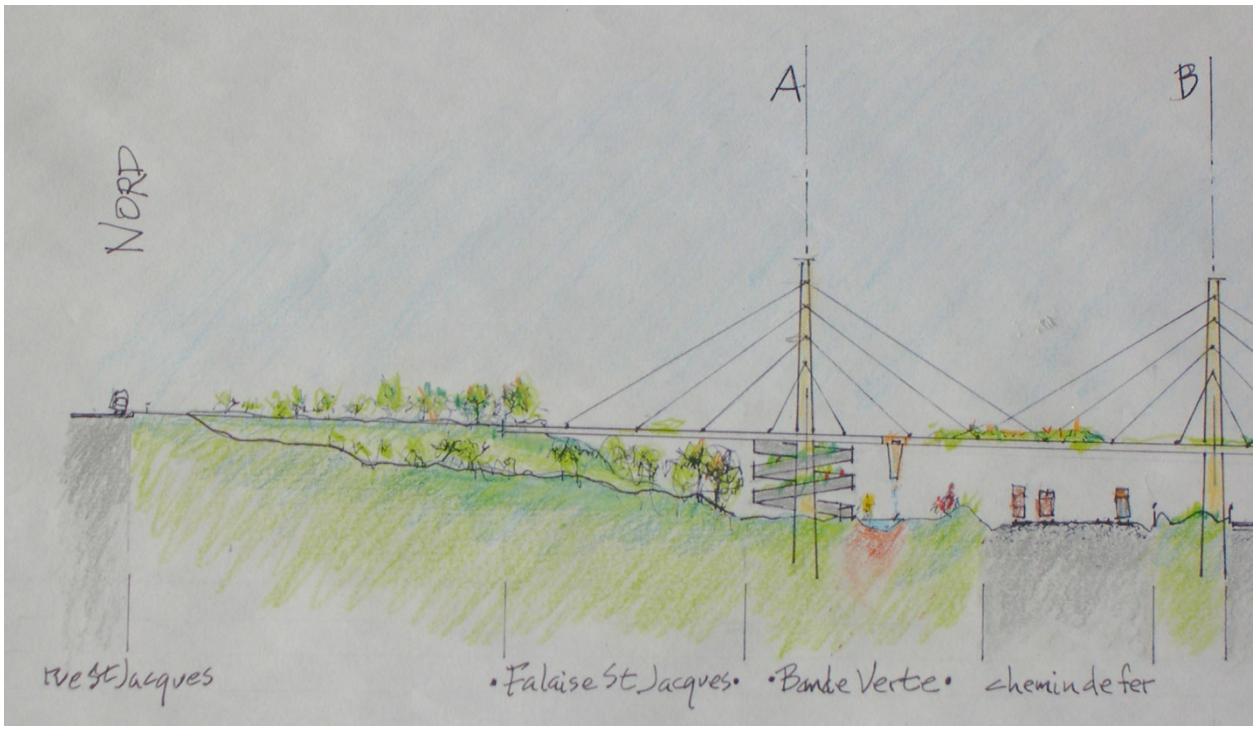
Dalle Parc

B.1] Scheme of Things

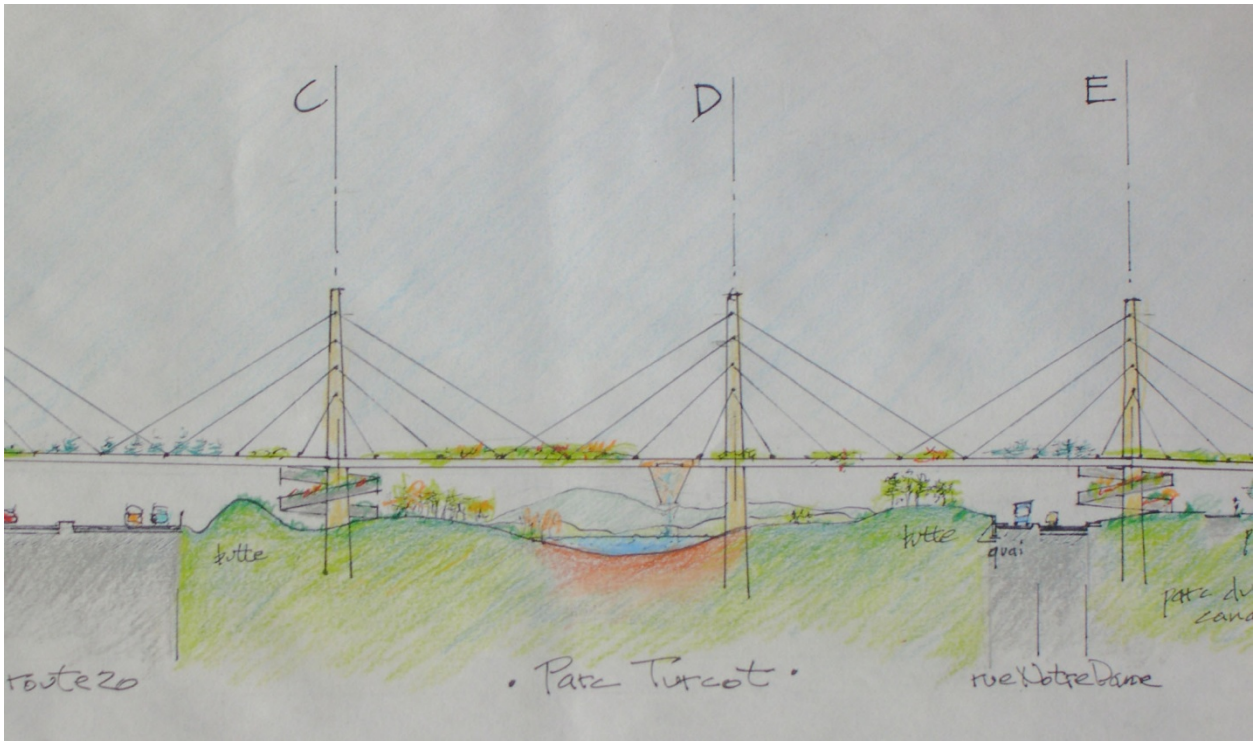
There have been suggestions that the Dalle Parc begin at the crest of the Falaise St Jacques and end at the new Parc Turcot. Connection of this new park to the Lachine Canal has been suggested as being by way of a tunnel under Notre Dame. This would be short sighted. In fact this tunnel would make the new Parc Turcot a dead-end. A tunnel for active transport is a psychological wall to many citizens. They feel uncomfortable and unsafe using it. Moreover the tunnel would only lead to the northern bank of the Lachine Canal. It would still be leaving the South West, Verdun and Lasalle unconnected to the Dalle Parc-Falaise St Jacques-Parc Turcot. This was never the stated intention. The Dalle Parc is to be the means of rejoining the South West, Verdun and Lasalle to NDG, separated because of expressways and railroad lines.

We are encouraged that M. Luc Ferrandez (Maire d'arrondissement Mont Royal, Membre du comité executive, Responsable des grands parcs) has a vision that is larger than the scope of any one particular park or greenway. He stated this in the public announcement of the Falaise St Jacques as a Grand Parc this summer. [iv] He also envisioned that there should be a continuity of urban space given to Nature and the human scale that would extend across Montreal. He was invoking a vision that was very similar to that of the green orbs.

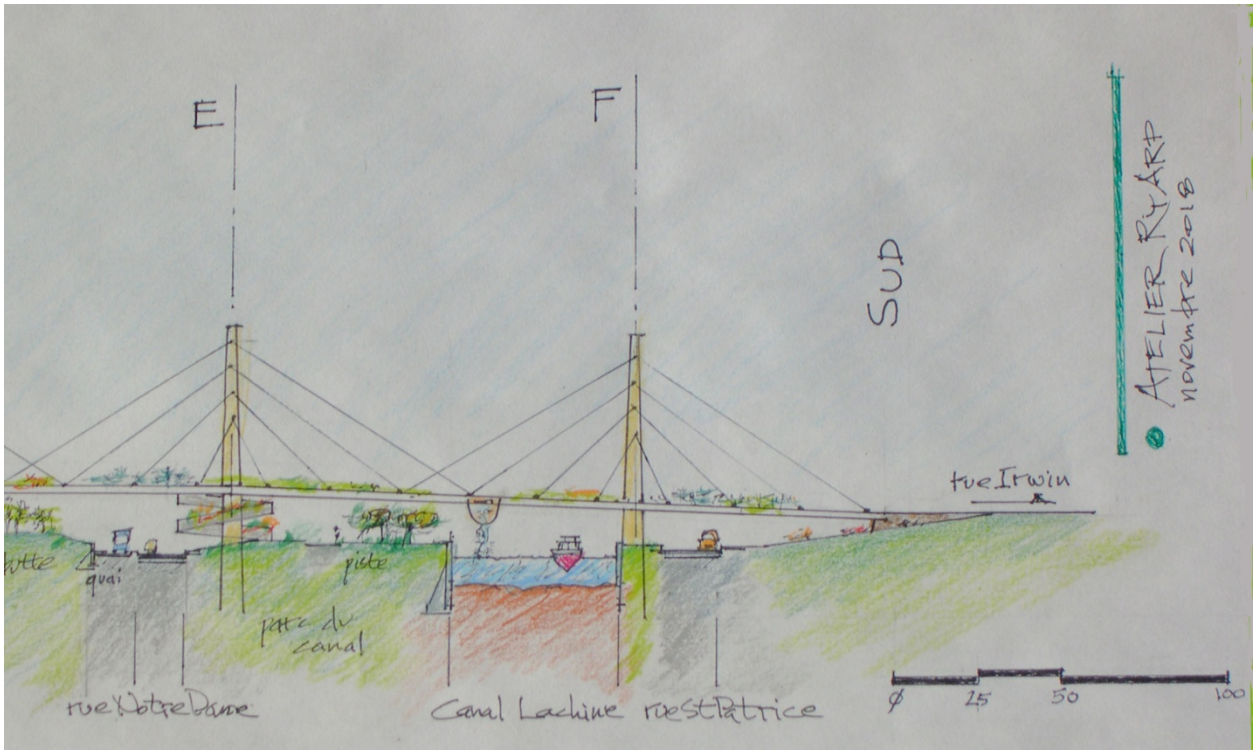
With this in mind foresight should be shown to the location and connections of the Dalle Parc so that it becomes integral to green pathways across Montreal, as well as active transport. It should span from the crest of the Falaise St Jacques across la Bande Verte, railroad lines, Route 20, new Parc Turcot, rue Notre Dame, the Canal Lachine, and St Patrick street. Its jumping off point should be the crest of the Falaise St Jacques near Cavendish and its landing point about 50 meters south of the intersection of St Patrick and Irwin along Irwin Street. This is where Irwin Street goes uphill.



Dalle Parc from rue St. Jacques, down the Falaise St. Jacques, across the Bande Verte and railroad lines



Dalle Parc from across Route 20, the new Parc Turcot, rue Notre Dame, and the Parc du Canal Lachine



Dalle Parc from across rue Notre Dame, Parc du Canal Lachine, and rue St Patrice to Irwin Street

And beyond that, it should be connected to the shoreline of the St Lawrence River in Verdun by way of Irwin Street, Parc Agrignon and either a green channel through the grounds of the Douglas Hospital or by way of the Aqueduct. In the other direction it could be connected to Mont Royal by the Projet Darlington plus various new greenways in NDG leading to Cavendish and thence down to the crest of the Falaise St Jacques.

Dalle Parc to Irwin Street allows for continuation to the St Lawrence River and connects to four cycling paths that cross NDG, Lasalle, South West, and Verdun

B.2] Signature Piece

The Dalle Parc should be the signature piece that represents Montreal's desire to integrate Nature into urban planning. Thus it should have a certain beauty in its structural simplicity and certain beauty in its proportions. But plants, shrubs, and trees should prevail over the visual design character of the bridge. The greenness of the bridge should be visible from all angles. It should be evident from Route 20 and rue Notre Dame. There should be a good proportion of evergreens so that in winter its green character is still evident.

It might integrate also a blue way. The waters for this blue way, a small channeled stream, might be supplied from storm water holding ponds in NDG. Thus the Dalle Parc could have waterfalls. One would be to the stream of the Bande Verte, another to a small lake as part of the new Parc Turcot, and another to the Lachine Canal.

B.3] Connections

The Dalle Parc has a long span. It must be connected with ground at significant points. This should be done with wide spiralling ramps. The ramps will provide vertical ascension for cyclists, pedestrians, and flora/fauna. There is a good cycling ramp in Longueil that indicates what is possible. In the Dalle Parc the width would have to be widened so to also accommodate pedestrians and flora/fauna.

Spiral ramp in Longueuil

The spiralling ramps could be designed so that cyclists have the outside of the spirals with the inner parts given to greenway plantings and pedestrian way. They should be designed so as to guarantee universal accessibility. The significant locations for these spiral ramps for the Dalle Parc would be the Bande Verte, the new Parc Turcot, and the north side of the Lachine Canal.

B.4] Initial Design Parameters

For the Dalle Parc to be a park and not a passageway a certain width is needed. The minimum width of the Dalle Parc should be 15 meters. With that distance it is possible to landscape swales, shrubbery, evergreens, and a stream, as well as a cycling path and walking way. There should be a minimum slope from the crest of the Falaise St Jacques to Irwin Street on the other side of rue St Patrick for water flow by gravity.

B.5] Mitigation of Aerial Effect

Being suspended in the air the Dalle Parc will be fully exposed to strong winds, full sunlight, and other weather extremes from time to time.

Consideration should be given from the beginning to integrate elements for wind deflection and shade in places. Then when crossing during extreme weather events there will be sections that are buffered from the extreme weather and the crossing will not be unpleasant. As much as possible these mitigation measures should incorporate greenery and natural features. The end effect should be that while crossing the Dalle Parc with its width and mitigation effects that one might almost become unaware of the Route 20 below or the railroad lines.

B.6] Naming the Dalle Parc

Mention has been made that eventually the name Dalle Parc might be superseded by a more descriptive name. We propose two possibilities for consideration: *Le Pont Vivant, Le Pont Vivace.*

La Falaise Saint Jacques

C.1] Paths and Sanctuaries

La Falaise St Jacques as 'Grand Parc' should have a network of walking paths that are natural. Where the ground is very uneven board walk sections should be built. There might even be some bridges over small gulleys. These paths could wander up or down the escarpment on diagonals. But there should be areas that do not have pathways. They should be sanctuaries, areas into which we do not venture so as to give wildlife respite from constant human presence. They serve a most important natural function. These sanctuaries are a flyway into the heart of Montreal for many bird species. The

total area of these sanctuaries should be more than half the total area of the park. In this way the Falaise St Jacques will be 'wilderness-tending'. It will be similar to the Bois de Liesse although its shape will be quite different.

There must be a walking pathway along the edge of the crest of the escarpment. At points there could be viewing platforms from which the lower reaches of the city could be seen against their backdrop of the St Lawrence River and countryside. At least one long diagonal pathway should descend to the foot of the escarpment and the Bande Verte. A good location would be mid-length.

C.2] Grottoes

At various points along the network of natural paths there should be 'grottoes'. They would be constructed of wood. Each should be somewhat different. Each would provide a slightly out-of-the-weather respite for visitors to the Falaise St. Jacques but be constructed in such a way and with such materials as to be a natural addition to the landscape. There should be no more than five or so of these, spaced at approximately equal intervals going east to west, and at different elevations, some at the bottom of the escarpment, some near the crest, and others in-between.

Grotto from a park near Atlanta built in wood, similar could be built for the Falaise St. Jacques

C.3] Pavilion

A pavilion might be constructed at the jumping off point for the Dalle Parc from the the Falaise St Jacques. This building would be partially built into the side of the escarpment so as to diminish its visibility. It might have a dual function. The first would be that of welcome centre with café, rest rooms, and a shop where snowshoes or other equipment might be rented. The second would be a multi-media and exhibition space related to the natural history and biota of the escarpment.

C.4] Descending Streams

The idea of reintroducing streams that would fall from the crest of the Falaise St Jacques to the Bande Verte should be investigated. Water flow is an essential characteristic of deciduous forests. The visual and aural enhancement of falling water at various times of the year would be most enjoyable. It need not be a constant flow, should not be. It should follow the rhythm of rain storms, snow melt. If there were storm retention ponds on the top of the escarpment, then these streams could take their water flow from them.

C.5] Meadowbrook

There needs to be a continuous as-natural-as-possible connection to Meadowbrook from the western end of the Falaise St Jacques and the Bande Verte. An idea, as an off shoot of the Dalle Parc, is for a Nature skyway. It would also fly over the train lines. It might be hybrid in that it would be pinned at places into the escarpment. This connection should be an initial part of the design process for the rebuilding of the St Pierre interchange. It should not become a distant afterthought, difficult to integrate into completed new construction work.

C.6] ATOD along St Jacques

It is time that urban planning begins to give consideration to citizens who enjoy a lifestyle wherein active transport is their primary choice. They find enjoyment in traversing the city by bicycle or other active means. It is the most healthy transport choice, the most sustainable transport choice, the human-scale transport choice. And many times it is the most efficient transportation choice.

Transport Orientated Development (TOD) has been a catch phrase this past couple of decades in setting out a new way of developing residential neighborhoods. It uses public transit hubs as the key element, most often developing around métro stations or train stations. If that concept is taken further and becomes Active Transport Orientated Design (ATOD) we could add another tool to the planners' tool box. The land on the plateau between the St Jacques Escarpment and St Jacques Street has great potential to be developed with this new ATOD concept. It is in close proximity to the protected east-west de Maisonneuve cycling path and the Dalle Parc north-south nature cycling path with all of its connections.

C.7] Towards Downtown

Another opportunity that should be considered is that of continuing pathways from the eastern end of the Bande Verte and Falaise St Jacque towards downtown Montreal. Would it be possible to extend the cycling path all the way to near the Centre Canadien d'Architecture at Fort with regained lands from the reconfigured Ville Marie expressway or slung under existing expressway infrastructure? It is a challenging problem of the same magnitude as that of connecting Meadowbrook to the west. But these challenges are worthy of excellent design resolutions for the added connectivity of citizens to Nature by way of active transport.

Le Parc Turcot

D.1] Theme

The idea of a major theme for this new park may prove helpful in giving it a direction. Then elements can be organized for its composition and even in deciding the shape of its land features. This major theme should not preclude other activities that may be located in parts of the park. The new Parc Turcot will be located in an area that is rich in both natural and human history. From these a theme may be taken. In this section we propose several possibilities for a unifying theme within which other activities could find their place. Each paragraph expresses the source for a theme.

The Falaise St Jacques was at one time the shoreline of the ancient Champlain Sea. This water body existed after the retreat of the last great ice sheet about 10 000 years ago. More recently the Lac aux Loutres and the Rivière St Pierre existed until a little over a hundred years ago near the site of the future park. They were part of the natural hydrology of the island of Montreal.

There has been a long aboriginal presence on the island of Montreal. The most famous artifact of that presence is the drawing of the village of Hochelaga by Giacomo Gastaldi after reading Jacques Cartier's journal of his visit there in 1535. There are few commemorations in Montreal of this aboriginal presence that has been here since time immemorial.

From the design workshops leading up to the OCPM hearings, there was an overall consensus that Nature be a key design element. But Nature expresses itself in myriad ways from backyard gardens to wilderness. In the workshops there was frequent mention of indigenous species as an excellent starting point. Everyone realizes that this new park will be a total creation. There is no existing undisturbed area.

Without a doubt because of its unique location for arrivals by way of Dorval airport the new Parc Turcot along with the Dalle Parc should become the signature piece for Montreal. The Dalle Parc could be an expression of Nature within the city, and the Parc Turcot could extend that idea to include the aboriginal presence on the island of Montreal.

D.2] Users of the Park

Consideration of who will use the park is important but it is not an easy task. The park being on its own without any adjoining residential neighborhoods presents a difficult situation.

Emphasis might be given to those whose enjoy active living. And many young families will be foremost among that group. If, as mentioned in "C.6] ATOD along St Jacques" above, there is a new neighborhood of active citizenry living on the St Jacques plateau above the escarpment, for certain they would be dedicated users of the new park. Their children would likely enjoy learning about ecology. Features such as a shallow pond and stream with its pollywogs, frogs, and fish, wetlands and groves with its birds, rolling grasslands with its insects and butterflies would interest them.

If the chosen theme for the park is our aboriginal predecessors and their culture, then there could be various installations and events that would give voice to that history. Aboriginal peoples, most likely headed by the Mohawks, might use the park in a celebratory manner to show their historical presence on the island of Montreal. For example they might have part of their annual pow-wow celebration within the park. One could imagine them coming from either end of the Dalle Parc in ceremonial walk to meet within the centre of the park. Dancing, singing, and drumming would be certainly a highlight. They could be designated the honorary guardians of the park. Discussions would need to be held with them to see if this is a feasible consideration.

D.3] Shape of the Park

The new park will be surrounded by traffic, especially along its northern edge. In that sense it is like a low island exposed to storm weather. It is a major concern. The whole future success of the park depends on being able to insulate it from the nefarious effects of so much adjoining traffic.

The designers of the park might exchange this island image for that of a boat with high gunwales. Then they might find solutions to the traffic problem. The shaping of land forms of the park should be done in such a way as to give it a good sense of seclusion from the surrounding traffic scene. The shaping should buffer the sound levels. In that sense it might take the shape of a wide secluded valley with ridges around the perimeter.

Traffic approaches the new park from two directions, one being downtown and the other being the West Island with Montreal's international airport. It is the entry way for air travellers. Thus it is an opportunity to make a statement to them. We would like to put forward the idea of two hillocks marking the two ends of the park. If the theme for aboriginal presence as put forward in "D.1] A Theme" is retained, then the western hillock could be planted with white pines, the eastern with red

pines. The pine is the symbol for aboriginal peoples within the centre of the flag of Montreal. These hillocks should be similar in height to the Dalle Parc.

The new park has two parts, one being separated by a roadway. This should not occur. A land bridge must span the roadway to the western part. It is a required element. Otherwise that smaller part will become orphaned from the park itself. The width of that land bridge need not be the complete length of the dividing roadway, half of that distance as a land bridge width should be sufficient.

A wandering water body should be set that commemorates the Lac aux Loutres. Or it might be interesting to have two large water bodies connected by a stream. One could be a shallow pond and the other a wetland with a boardwalk.

D.4] Nature Within the Park

The consensus from different citizen design sessions is that Nature is the prime consideration.

Parc Agrignon is a contemplative park. There are few installations for sports. It is suitable to long Nature walks in the city. The Falaise St Jacques should be more of a wilderness type park. It is the flyway for birds entering Montreal. As mentioned in "C.1] Paths and Sanctuaries", more than half of the total area of la Falaise should be given to wild life sanctuaries.

When considering the new Parc Turcot thought might be given to a different expression of Nature from that of Parc Agrignon or La Falaise St Jacques. Being a park created from nothing there is the possibility of doing many different things. It might be a combination of wilderness-tending with more cultivated parts. The water body might be a shallow creation of a wetland at one end with deeper water pond at the other.

Since it will be a completely created park the planting of groves of particular trees might be done. A large grove of white birch would be impressive as well as a sumac grove. The western hillock could be planted with white pines, the eastern with red pines. With choice of trees consideration should be given to their colour display with the changing of the leaves in autumn.

D.5] Elements

Besides the major element of Nature itself as expressed in the previous section of this brief there are other considerations.

If the theme for aboriginal culture put forward in "D.1] A Theme" is retained, then the idea of a lacrosse field might be a fitting installation. It must be natural turf.

Again if the theme for aboriginal presence put forward in ”D.1] A Theme” is retained, then a certain part of the park might be designed to accommodate celebrations, such as pow-wow music and dancing. It might take the form of a semi-circular area carved into a high embankment. Possibly it could be carved into the white pine hillock at the western end if the hillock idea as expressed in “D.3] Shape of the Park” is retained.

Night lighting is a difficult consideration. Within the park there should be no light pollution skywards. The lighting of Route 20 and Notre Dame should be masked in such a way that none of their light escapes into the park.

The area under the Dalle Parc Bridge might be designed as an area protected from inclement weather such as a summer thunderstorm. It might have an adjoining small terrace with a summer time café. This would also be a good location for facilities to park visitors.

If wetlands are created as part of a water body then a boardwalk extending out into that wetland would provide direct contact.

Thought might be given to artistic expression through Nature as with the Jardins des Métis in the Gaspé. There each year a new set of contemporary gardens are designed by landscape architects. A central part of the park could be given to such an artistic expression.

The ideas expressed in this section are mostly at an initial consideration phase. They have not been tied into a holistic design direction. They should be viewed as a list of ideas.

D.6] Surrounds

The question of separating the park from expressways and Notre Dame should be considered at an early point. Will it be chain link fencing, precast concrete panels, berms, deep ditches, water channels, or a combination of some or all of these? It is certainly too early at this point to decide but they will have an effect on how the park is perceived both from within it as well as vehicles passing by its perimeter, even by walkers from the crest of the Falaise St Jacques and cyclists along the Lachine Canal. Early consideration is important. If it is considered late in the process when most of the budget has been designated, it may fall to the least expensive option.

D.7] Connectivity

Connectivity or access is a major concern. Public transit needs to be considered from the beginning. The STM must be involved. Notre Dame Street will be the street of entry. Possibly a bus route loop from Lionel Groulx métro station to Agrignon métro station should be considered. This future bus service should allow for bicycle transport. A special quay might be considered for school buses.

There would of necessity be some limited parking. But vehicular access should be much less important than public transit and active transport. The success of this park should not be seen to hinge on vehicular access. This is entirely in the realm of being possible if one considers Parc Maisonneuve whose main means of access is by way of walking from surrounding neighborhoods or cycling to it by protected paths, or by taking public transit of either bus or métro.

D.8] Responsibility

The question of maintenance responsibility and park renewal after a certain number of years should be addressed early in the park's lifetime. Will a small maintenance barn be necessary? Will some of the paths be cleared of snow in the winter? Who will be responsible for the care of the trees of the park?

End Notes

[i] https://greenliving.lovetoknow.com/What_Is_the_Average_Carbon_Footprint

An excerpt: "...Suburbs are thus responsible for 50% of household emissions in the U.S. New York City's suburbs, for example, are not as green as the city center. Manhasset, one of its suburbs in the Nassau county, has an average footprint of 72.4, and is double that of New York City. The emissions due to transport are four times that of the city center. Similarly larger houses means 2.5 times more emission than the houses in the city center..."

[ii] https://www.actualites.uqam.ca/2017/luc-ferrandez-homme-action

Quant au quartier Mile End, il est devenu l'un des principaux pôles d'emploi à Montréal et aussi un pôle de culture et de création. «Nous y avons créé 5 500 emplois depuis 2012, souligne Luc Ferrandez. Nous avons réussi à garder Ubisoft et à attirer des entreprises de partout dans le monde, notamment de Californie et d'Angleterre. Comment y est-on parvenu? En faisant de ce quartier un milieu de vie où les résidents ont envie de travailler, de se divertir, de se nourrir et de se cultiver.»

[iii] https://www.emeraldnecklace.org/wp-content/uploads/2015/11/Emerald-Necklace-Map.pdf

This link is to a detailed map of the Emerald Necklace which also indicates the numerous points of interest that are tied into this interconnected set of parks with green connections.

[iv] https://www.youtube.com/watch?v=iTEUllc087I&feature=youtu.be

At 8:50 into this youtube M. Luc Ferrandez explains the concept of a network interconnecting different major parks of Montreal, specifically mentioning the desirability of having a connection between le fleuve St Laurent, parc Agrignon, the new Parc Turcot, and La Falaise St Jacques.