PARC GEWURZ-REMER CONCEPT PLAN

GROUPE ROUSSEAU LEFEBVRE_MÉLANIE GLORIEUX

THE ELEMENT OF SURPRISE:

DEFYING EXPECTATIONS

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SOMETIMES, IT IS necessary to defy expectations; sometimes, a plan must be radically different from any other. These two unique Montreal projects were founded, first and foremost, on managing water resources responsibly, but their defining feature is the element of surprise. In both projects, the designs are underpinned by a subtext that speaks to our urban relationship with water.

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GEWURZ-REMER: A THOROUGHLY MODERN HABITAT

Gewurz-Remer Park is a complex of wetland environments and wildlife habitats designed for an urban setting. Its aesthetic is completely modern, yet the linear promenade is very much a window on a series of beneficial wetland environments. The highly contemporary, strong circular lines of the Park design actually define a series of holding ponds and filtering marshes which are fed by runoff from nearby urban sites, as well as the St. Lawrence River, creating a dialogue between the park and its environment.

Gewurz-Remer Park is located in a new section of Nuns' Island, in the borough of Verdun in south-western Montreal, where it sits between new residential buildings and the Bell Canada campus. Major real estate developments in the area prompted the city to set aside the parkland for the creation of a wetland environment, as an environmental offset to be granted by the provincial Ministère du Développement durable, de l'Environnement, de la Faune et des Parcs (MDDEFP). As a result of site analysis, however, the original lagoon concept was abandoned owing to the major constraint of a 7-metre vertical drop to the river; the park would have resembled a narrow ravine with excessively steep banks and an inadequate aquatic environment.

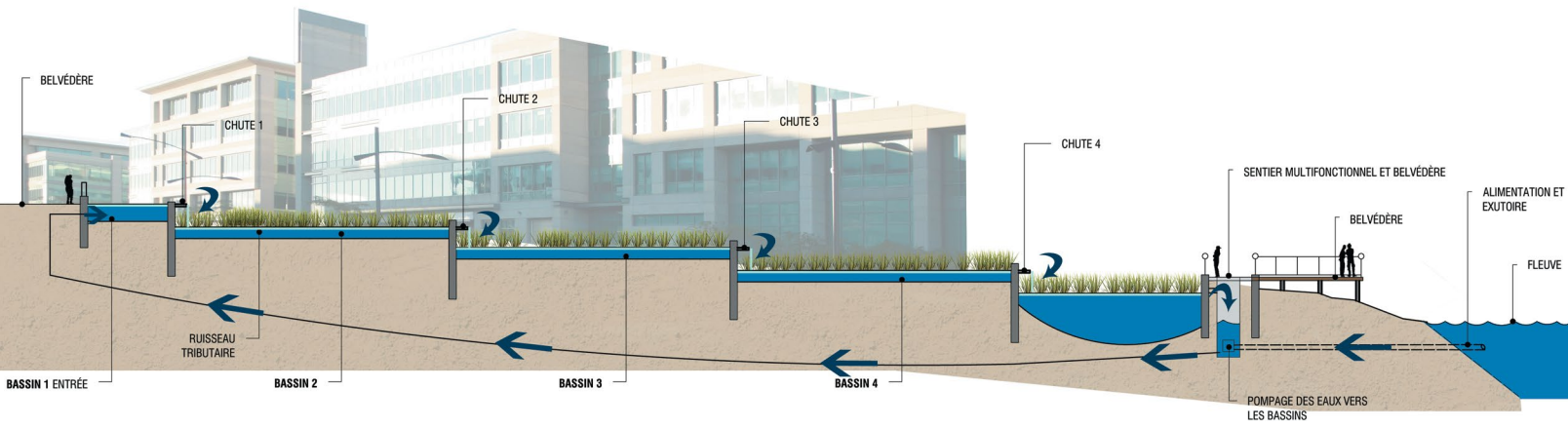
This major technical challenge led the Groupe Rousseau Lefebvre team to an alternate design that would make the most of this exceptional site: a series of ponds that would host wetlands and capture runoff from adjacent properties to keep the site hydrated. The park, which includes a recreational trail, is divided into terraces that follow the slope's contours, resulting in a dynamic suite of wetlands and filtering marshes. When there is insufficient rainfall to fill the ponds, the system draws water from the river. Conversely, any excess water is filtered and returned to the river.

DESIGN VERSUS NATURE or DESIGN + NATURE

From the start, the project presented design challenges that invoked every team member's expertise. The overarching challenge was to successfully combine functional, recreational, aesthetic and environmental elements. In essence, designers were creating an environment that would reproduce natural processes in an urban setting. Discussions with the MDDEFP were productive – at least until the final version of the design was submitted in order to secure the environmental offset. A new ministry project manager reversed his predecessors' decision, arguing that a "natural" landscape cannot also be aesthetic and architectural. MDDEFP officials also expressed serious doubts that fauna would colonize a space, designed by humans, for both people and wildlife. Indirectly, they called into question the very notion of manufacturing an urban ecosystem.

Given that the new environment was going to be artificial regardless of its design, Groupe Rousseau Lefebvre believed it was important that Gewurz-Remer make a statement with its ponds, which promised to enliven the space and create a pleasant environment for the community, while purifying the water. Despite the Ministry's comments, the City believed the project was exceptional and met its sustainable development objectives, so it went ahead with the project.

Today, the park is a rich tapestry of surfaces and waterfalls, a tribute to productive ecosystems and to the wildlife that did in fact move in, attracted by the newly built habitat. The system was



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completed in 2012; it works well, and the pond structures are visually interesting throughout the year. In 2013, the Park design took a CSLA Regional Award of Merit.

A FACADE THAT IS MORE THAN A PRETTY FACE

Because Groupe Rousseau Lefebvre is committed to testing non-traditional methods of urban water management, its own building facade has become a showcase of different technologies. The façade redesign, which is part of a larger stormwater management project, comprises a series of integrated systems which make maximum use of runoff from the roof.

The reclamation system captures rainwater from the building's eavestroughs and distributes it in three stages. The water starts its flow in a perforated galvanized steel channel, from which it runs along steel cables – "rain chains" – into planters built into the porch. Any excess flows into a nearby collection barrel, which supplies water to the planters during heat waves. Excess water can also be diverted into the rain gardens below, via two galvanized steel beams protruding from below the porch structure. The raised walkway connecting the city sidewalk to the porch produces the illusion of a passage over a large wetland planting, although a barrier hidden under the walkway separates the two basins. These basin-style planters in front of the building were designed to reproduce an impervious surface of the kind often found in Montreal, and planted with two types of organic soil with a high water retention capacity. Since Groupe Rousseau Lefebvre integrates research and development into its projects, the firm added a perforated observation window that makes it possible to watch the behaviour of water and plants in each system, to study differences in plant development and infiltration rates of the soils. The plants are indigenous species, carefully selected for their ability to thrive in a setting with frequent wet and dry cycles .

What makes this project unique is that when it rains, the façade comes to life as it transports rainwater that would normally have been channelled through gutters straight to storm sewer grates in the parking lot and street. Passers-by have their curiosity piqued by the unusual sight of rainwater sliding along the chains. People inside the building see the rivulets as an animated contrast with the normal motion of raindrops. In addition, the industrial aesthetic of the rainwater reclamation system contrasts with the building's fully restored 19th century materials and details.

As designers, we have the opportunity to manipulate water to create aesthetic interest in our projects and at the same time, provide food for thought; the trick is to make the most of that opportunity.

Sometimes, it is necessary to defy expectations; sometimes, a plan must be radically different from any other.

1-4 GEWURZ-REMER PARK **5+6** THE FACADE OF ROUSSEAU LEFEBVRE HEADQUARTERS
PHOTOS GROUPE ROUSSEAU LEFEBVRE

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