

# Canadian Brownfields Case Study

## Lansdowne Park Remediation



Source: PFS Studio 2018

*Aerial design image of the redevelopment plan for Lansdowne Park, Ottawa, ON.*

### PROJECT SUMMARY

Lansdowne Park is located in the capital city of Canada, the City of Ottawa, which is the fourth largest metropolitan area in Canada. Since 1888, Lansdowne was known by the Ottawa community as a place for sports, entertainment, and its unique historic heritage placed along the Rideau Canal<sup>1</sup>. In 2007, engineers discovered that the Frank Clair Stadium had structural damage in the vertical support columns and horizontal beams (stress cracks) that resulted in the demolition of the site<sup>2</sup> due to public safety concerns and inability to satisfy community needs.<sup>3</sup> The redevelopment plan was intended to provide underground parking, and mixed-use development resulting in residential, retail, and recreational uses along with a revitalized stadium.<sup>4</sup> Due to the changing nature of site uses upon redevelopment, Ontario Regulation 153/04 required Records of Site Condition which deemed it to be a brownfield site.<sup>5</sup>

The Lansdowne Partnership Plan (LPP) was approved by council in 2012 and the project reached completion by the spring of 2015.<sup>6</sup> Through public-private partnership, Lansdowne became a central focal point of the city and was more than just an entertainment facility. The project was successful in capturing Lansdowne's unique history with a 21st century spin; integrating an urban park adjacent to the

Rideau Canal, a mixed-use village, a renovated stadium, and immense opportunity for active transportation options through the development of a comprehensive transportation plan in tandem with the project.<sup>7</sup>

### QUICK FACTS

#### Location

Ottawa, Ontario

#### Project type

Urban park remediation

#### Site size

16 hectares

#### Land uses

Mixed-use (retail, residential, commercial), urban park, recreation

#### Keywords/special features

Public-private partnership, LEED, mixed-use development, heritage

#### Website

<https://www.tdplace.ca/lansdowne-park/>

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Case studies were prepared as a course assignment by students enrolled in PL8312/PLE845: Brownfields & Sustainable Development, School of Urban and Regional Planning, Ryerson University (Winter 2021). Information for the case studies was obtained from online sources, available reports, and, in some cases, site visits and direct communication with stakeholders.

If you are aware of any errors or updates to the case studies, please contact [chris.desousa@ryerson.ca](mailto:chris.desousa@ryerson.ca).

The opinions expressed in this case study are those of the authors only and do not represent the opinions and views of either Ryerson University, the School of Urban and Regional Planning, or the Canadian Brownfields Network.

## Site Characteristics and History

Lansdowne Park is a 16 ha site dating back to 1888 that was previously used as a fairground, entertainment facility, and sports stadium. Prior to this, Lansdowne was used by the military during the Boer War, WWI, and WWII as staging areas.<sup>8</sup> The convenient location of the site adjacent to the Rideau Canal is a focal point for the city; located along Queen Elizabeth Drive (QED) at the eastern portion of the site and along Bank Street, a major corridor connecting the city on the western portion. Lansdowne is located between the Glebe and Old Ottawa South connecting the inner portions of the city.<sup>9</sup>

The Coliseum was the first building to be constructed on the site in 1903 as a show building for livestock. Shortly following the construction of the Coliseum, the roof collapsed due to heavy snow conditions in 1904.<sup>10</sup> The repair of the Coliseum included an expansion, developing Howick Hall, an auditorium. In 1907 a fire was responsible for destroying a large portion of the existing buildings on the site, including the grandstand, followed by a boiler explosion in 1914 in the basement of Howick Hall during the Ottawa Winter Fair.<sup>11</sup> The boiler explosion was responsible for killing 3 people, injuring 20, and killing a substantial amount of livestock. In 1926, Howick Hall was refurbished and in 1967 the Civic Centre was built.<sup>12</sup>

By 2006, the remaining existing structures were aged and in disrepair.<sup>13</sup> Howick Hall was later demolished in 2012. The site is also home to two designated heritage buildings: the Aberdeen Pavilion National Historic Site and the Horticulture Building.<sup>14</sup>

The Aberdeen Pavilion is the last surviving Canadian example of a Victorian exhibition hall, leading to its designation as a National Historic Site of Canada in 1983. It was an exhibition hall for agricultural shows and later was an important military structure during the Second World War and Boer War.<sup>15</sup> The Horticulture Building was built in 1914 as a venue for the Central Canada Exhibition's annual horticulture show. The building was scheduled for demolition in 1991 but received community opposition and was designated as a heritage building 1993.<sup>16</sup>

## Assessment and Cleanup

Upon environmental investigations, soils



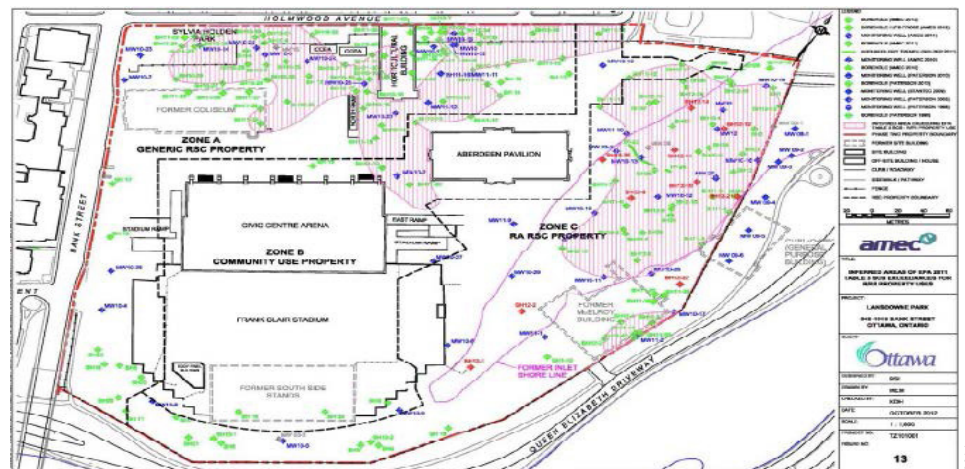
Renovations and relocation of the Horticulture Building at Lansdowne Park, Ottawa, ON.

were found to be contaminated with PAH and metals.<sup>17</sup> The heating plants that existed in former buildings on site led to soil contamination in the northern portion of the site. The portion of the site adjacent to the Rideau Canal was used as a landfill site prior to 1925 that was found 5-metres below ground surface.<sup>18</sup> The contaminated soils were contained on-site to minimize risks to public health and environmental impacts.<sup>19</sup>

was the stadium and community use, and Zone C was the new urban park.<sup>20</sup> By separating the site into three zones during the cleanup phase, each of the zones were able to have individualistic remedial plans. It was decided that the former landfill would remain in place in Zone C because of the size of the landfill and the nature of the contaminants that it contained (metals and ash).

The environmental remedial plan separated the site into three zones dependent on their future land use in the redevelopment plan: Zone A was mixed-use residential and commercial, Zone B

Environmental remedial plan, zone categories for cleanup and redevelopment.



was developed to manage the northern portion of the site where Zone A and the underground parking garage were designated.<sup>21</sup> The contaminated soils were excavated and utilized as an earthen berm for the construction of the new underground parking facilities that would be developed on the site.<sup>22</sup> The risk soil would be used for a berm on the side of the stadium located near the Rideau Canal; the urban park infrastructure was strategically designed so that there was minimal intrusion with the contaminated soils and specific tree planting considerations that did not have deep rooting to avoid disruption of the contaminated soil relocation.<sup>23</sup> By allowing the landfill to remain in place and relocating the contaminated soils on site, development costs were substantially minimized and the redevelopment allowed for innovative soil management strategies<sup>24</sup> that ultimately led to the successful redevelopment of Lansdowne Park as a brownfield project.

An air monitoring program was also implemented during the remediation phase because of the sites close proximity to a densely populated residential community. The program was intended to make sure that dust emissions from the remediation process were monitored and controlled minimizing impacts to the surrounding community members. The Operations Manual for Air Quality Monitoring in Ontario indicated that the program met the requirements outlined.<sup>25</sup>

### Planning and Regulatory Framework

In 2008, the City of Ottawa decided to hold an international design competition for the redevelopment of Lansdowne Park which was quickly suspended after OSEG proposed a public-private partnership with the City for a redevelopment plan including residential and commercial spaces and the redevelopment of the stadium.<sup>26</sup> In 2010, after the City agreed to move forward in partnership with OSEG, the redevelopment plan was divided into two components after the City rejected part of OSEG's proposal for the part of the site that was adjacent to the Rideau Canal.<sup>27</sup> The City decided to reopen a design competition for an urban park that would be located on that area of the site and after receiving five proposals, OSEG submitted a second proposal of their plan for that portion of the site; the City decided to move forward with OSEG's proposal.<sup>28</sup>

The redevelopment plan included the demolition of several buildings and involved relocating the Horticulture Building. The Coliseum was demolished in 2012 for the purpose of providing a new foundation where the Horticulture Building would be relocated and excavation of any contaminated soil would remain.<sup>29</sup>

The plan required a Zoning By-law Amendment (ZBA) to permit commercial and

residential uses to be placed on site<sup>30</sup>, Site Plan Control, and Heritage Approvals due to the plan to relocate the Horticulture Building on site.<sup>31</sup> However, there were public objections that made their way to the Ontario Municipal Board (OMB) in 2011, regarding the size of the project with concern that the project should not include mere consideration of re-zoning, but also an Official Plan Amendment (OPA).<sup>32</sup> The City came to a settlement with the appellants resulting in a decrease in building heights proposed, capping residential developments at 280 units, traffic restrictions, and additional protection of park space.<sup>33</sup>

A Community Transportation Study (CTS) was used to address how the proposal impacted the site's transportation feasibility. The use of the site due to the nature of regular events taking place at the Stadium indicated that the focus of the Transportation Strategy should be to increase and support public transit services, include satellite parking and shuttle busses, and should support interventions for traffic operations.<sup>34</sup> In 2012, the Lansdowne Partnership Plan (LPP) was approved by City Council and construction began in October 2012 with final completion of the redevelopment in 2015.<sup>35</sup>

The Frank Clair Stadium was renovated and the south stadium stands that had structural damage were reconstructed. The redevelopment plan also involved the construction of a new urban park adjacent to the Aberdeen Pavilion and Horticulture Building, underground parking facilities accommodating 1370 vehicles<sup>36</sup>, and newly built residential and retail above ground.<sup>37</sup> The newly constructed mixed-use facilities included "360,000 square feet of retail space, 100,000 square feet of commercial office space, and 280 residential units (two condominium towers and 49 stacked townhouses)".<sup>38</sup>

### Financing

The City contributed approximately \$210 million for the redevelopment of Lansdowne Park which can be broken down by \$167 million for the redevelopment of the stadium and \$44 million for the underground parking facility for shared city use.<sup>39</sup> OSEG contributed approximately \$117.3 million that was intended to cover the costs of construction for the retail and residential condominiums in the plan – both subject to property taxes.<sup>40</sup> OSEG has ownership over the commercial development of the site and



Source: Ottawa Tourism, 2019

A 2019 photo of the Aberdeen Square being used for the Ottawa Farmers' Market with the Aberdeen Pavilion in the background,

is responsible for the operation of the stadium.<sup>41</sup> The Lansdowne Partnership Plan entered into by OSEG and the City of Ottawa captures capital costs and contributions through a closed financial system that ensures that any financial distributions coming from operations are provided to both the City and OSEG.<sup>42</sup>

## Buildings

The redevelopment of Lansdowne can be divided into three major components: the Urban Park, Stadium and Civic Centre (also known as TD Place), and the Urban Village.

### Urban Park

The Urban Park is 18-acres and inclusive of the Aberdeen Square, Aberdeen Pavilion, and Horticulture Building. The Aberdeen Square, adjacent to the Aberdeen Pavilion, is an outdoor space that is utilized throughout the year for different purposes such as the Ottawa Farmers' Market and seasonal festivals or markets.<sup>43</sup> The Aberdeen Pavilion is a designated heritage site that remained in place upon completion of the redevelopment project. The Aberdeen Pavilion has many uses annually such as the winter farmers' market, and events programmed by the City such as "concerts, receptions, craft shows, and activities associated with stadium events".<sup>44</sup> The Horticulture Building is also a designated heritage site in Ottawa and remains as an exhibition hall although it was relocated on site. The building serves as an event hall, also including leasable commercial and retail space, and provides office space to City staff.<sup>45</sup>

### Stadium and Civic Centre (TD Place)

The redevelopment of the Stadium and Civic Centre, known as TD Place, features a natural landscape corridor adjacent to the Rideau Canal and updated grandstands and facilities intended to provide a program space that can be multi-



Site Plan of redevelopment of Lansdowne Park.

use.<sup>46</sup>

### Urban Village

The Urban Village was intended to enhance the City's commercial corridor along Bank Street by providing 360,000 square feet of mixed retail space with short-term parking accommodations underground.<sup>47</sup>

While the City retains ownership of Lansdowne as a whole, the City entered into a long-term lease partnership with Lansdowne Retail Limited Partnership for the retail component of the site. The closed financial system entitles the City to 50% of the net revenue that is generated by the retail portion of the site 30 years after the redevelopment was constructed and opened.<sup>48</sup>

The City had air rights to the space above both the retail component and parking garage. The residential air rights were sold by the City to Minto Communities Inc. for \$11.37 million which contributed to part of the City's funding in

redeveloping the stadium. The City also leased 1000,000 square feet of office air rights to Minto Properties Inc. for a term of 50 years with the option for renewal.<sup>49</sup> Together, the addition of the retail, residential, and office space to Lansdowne through various public-private partnerships with the City led to the success of Lansdowne as a vibrant and unique urban space.

## Key Challenges, Benefits, Lessons Learned:

The redevelopment of Lansdowne is a leading example of how smart growth and sustainable development principles can be incorporated into the revitalization of a site that has fallen into disrepair. The incorporation of green infrastructure, support for active transportation, and leading green design led Lansdowne's redevelopment program to LEED ND Gold Certification.<sup>50</sup> Through public-private partnership among all sectors of the redevelopment, the City was able to ensure that the necessary financial and operational investment needed to maintain the site was met and were able to achieve secured, high-quality investment into the project throughout the life cycle of its redevelopment and operations.

The environmental remedial plan was an exceptional example of how cleanup projects can be done to support economic feasibility and reduce environmental and public health risks. The adaptive re-use of buildings and maintenance of historical structures allowed Lansdowne to preserve its historic charm while developing an urban place that attracts both



Retail and residential spaces at Lansdowne Park.

visitors and locals to participate in public programming, support local businesses, and live, work, and play in the vibrant city centre of the Capital.

## Endnotes

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