Heritage Impact Assessment: LeBreton Flats Plan of Subdivision

Final Report

October 2024

Prepared for:
National Capital Commission
202-40 Elgin Street
Ottawa, ON K1P 1C7

Prepared by:
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Project Number:
160401780

Limitations and Sign-off

The conclusions in the Report titled Heritage Impact Assessment: LeBreton Flats Plan of Subdivision are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

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Prepared by: Digitally signed by Giansante, Christian Date: 2024.10.25 09:40:45 -04'00'

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Printed Name and Title

Executive Summary

The National Capital Commission (NCC, the Client) has retained Stantec Consulting Ltd (Stantec) to prepare a Heritage Impact Assessment (HIA) for the implementation of the LeBreton Flats Plan of Subdivision in the City of Ottawa (the City), Ontario. LeBreton Flats (the Study Area) is bounded by Wellington Street and the Kichi Zībī Mīkan, formerly the Sir John A. Macdonald Parkway, to the north; the Trillium Path to the west; Albert Street to the south; and portions of Booth Street, Fleet Street, Lett Street and Slater Street to the east. The entire Study Area is bisected by the Confederation Line Light Rail Transit (LRT) system. A HIA is being completed to assess potential impacts of the proposed development on the previously identified and potential built heritage resources and cultural heritage landscapes. The HIA will recommend mitigation measures based on the proposed site development, where applicable.

This HIA follows the City of Ottawa's *A guide to preparing Heritage Impact Assessments* (City of Ottawa n.d.). The preparation of this report will also be guided by the Ministry of Citizenship and Multiculturalism's (MCM) Info Sheet #5 in *Heritage Resources in the Land Use Planning Process, Cultural Heritage, and Archaeology Policies of the Ontario Provincial Policy Statement, 2005* (Government of Ontario 2006a) (Info Sheet #5). This document uses *Ontario Regulation* (O. Reg.) *9/06* for determination of cultural heritage value or interest (CHVI) and also provides guidance on the assessment of impacts based on CHVI resulting from a proposed change (Government of Ontario 2006b).

Based on an evaluation against *O.Reg. 9/06*, the LeBreton Flats Cultural Heritage Landscape was identified as a cultural heritage resources having met five criteria of *O.Reg. 9/06.* Previously identified resources within the Study Area include the Ottawa Water Works complex, designated under Part IV of the Ontario Heritage Act. The Lorne Avenue Heritage Conservation District is located adjacent to the Study Area.

The impact assessment determined that the proposed development would result in direct and indirect impacts to the LeBreton Flats Cultural Heritage Landscape and to potential indirect impacts to the Ottawa Water Works complex Aqueduct and to the Lorne Avenue Heritage Conservation District. To mitigate these impacts, several development alternatives were considered as mitigation measures, including retention of the built components *in situ* and the implementation of an intensive Interpretation and Commemoration Plan. The following mitigation measures have been recommended:

For the LeBreton Flats Cultural Heritage Landscape and Ottawa Water Works complex:

- Retention *in situ* of tangible heritage attributes associated with the LeBreton Flats Cultural Heritage Landscape including the Booth Street Bridge and the Broad Street Bridge. Retention *in situ* and continued use of the Ottawa Water Works Complex's Open Aqueduct and Closed Aqueduct is feasible and recommended. The placement of historic street layouts and naming conventions such as Broad Street, Fleet Street and Booth Street, should be considered in create a tangible link between the historic LeBreton Flats community and the proposed redevelopment of the site.

  - Where changes are proposed to tangible heritage attributes that have been left *in situ* during the preliminary development phases, an additional Heritage Impact Assessment should be completed to assess impacts and identify alternative approaches. Potential design changes where a subsequent Heritage Impact Assessment will be required include, but are not limited to, proposals that consider daylighting/opening the Closed Aqueduct, alterations to the alignment of the Open and Closed Aqueducts, and alterations to the Booth Street and Broad Street Bridges.

- Future archaeological excavations should be led by a licensed archaeologist and completed based on requirements of the proposed development plan. Where archeological resources are identified, they should be recorded and stored for potential future interpretation.
- Preparation of an Interpretation and Commemoration Plan to commemorate the intangible cultural heritage value of LeBreton Flats. The Interpretation and Commemoration Plan should include site-specific history and specific commemoration requirements (i.e., interpretative signage, integration, and display of excavated artefacts). A focus of the Interpretation and Commemorative Plan should be telling the story of the evolution of the site, the people and communities who influenced the changes, and its ties to the surrounding areas.

For the Lorne Avenue Heritage Conservation District:

- To limit negative indirect impacts on individual properties adjacent to the proposed development, the adjacent heritage conservation district should be isolated from construction-related activities. These controls should be indicated on all construction mapping, flagged in the field onsite, and communicated to construction team leads. Site plan controls should also include stabilization measures and protective barriers for the adjacent designated properties to indicate where construction activities should be limited, this should include at minimum the installation of temporary fencing around heritage features. In addition, vibration studies for the adjacent listed and designated properties should be completed under the direction of a qualified geotechnical engineer or vibration specialist. A recommended approach to vibration assessment is as follows:

1. Pre-condition survey should be prepared by a qualified engineer to determine the maximum acceptable vibration levels, or PPV levels and the appropriate buffer distance between construction activities and the adjacent heritage resources.
2. Vibration monitoring should be carried out and consist of monitoring the ground-borne vibration levels, in PPV while construction activities take place.
3. Post-construction condition survey should be carried out as determined by the Geotechnical Engineer. Post-construction condition survey shall be conducted after completion of construction for comparison purposes.

General Recommendations:

To provide for the retention of historic information, copies of this report should be deposited with a local repository of historic material. Therefore, it is recommended that this report be deposited by the National Capital Commission at the following locations:

Library and Archives Canada
395 Wellington Street
Ottawa, ON K1A 0N4

Ottawa Public Library
120 Metcalfe Street
Ottawa, ON K1P 5M2

The Executive Summary highlights key points from the report only; for complete information and findings the reader should examine the complete report.

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Acronyms / Abbreviations

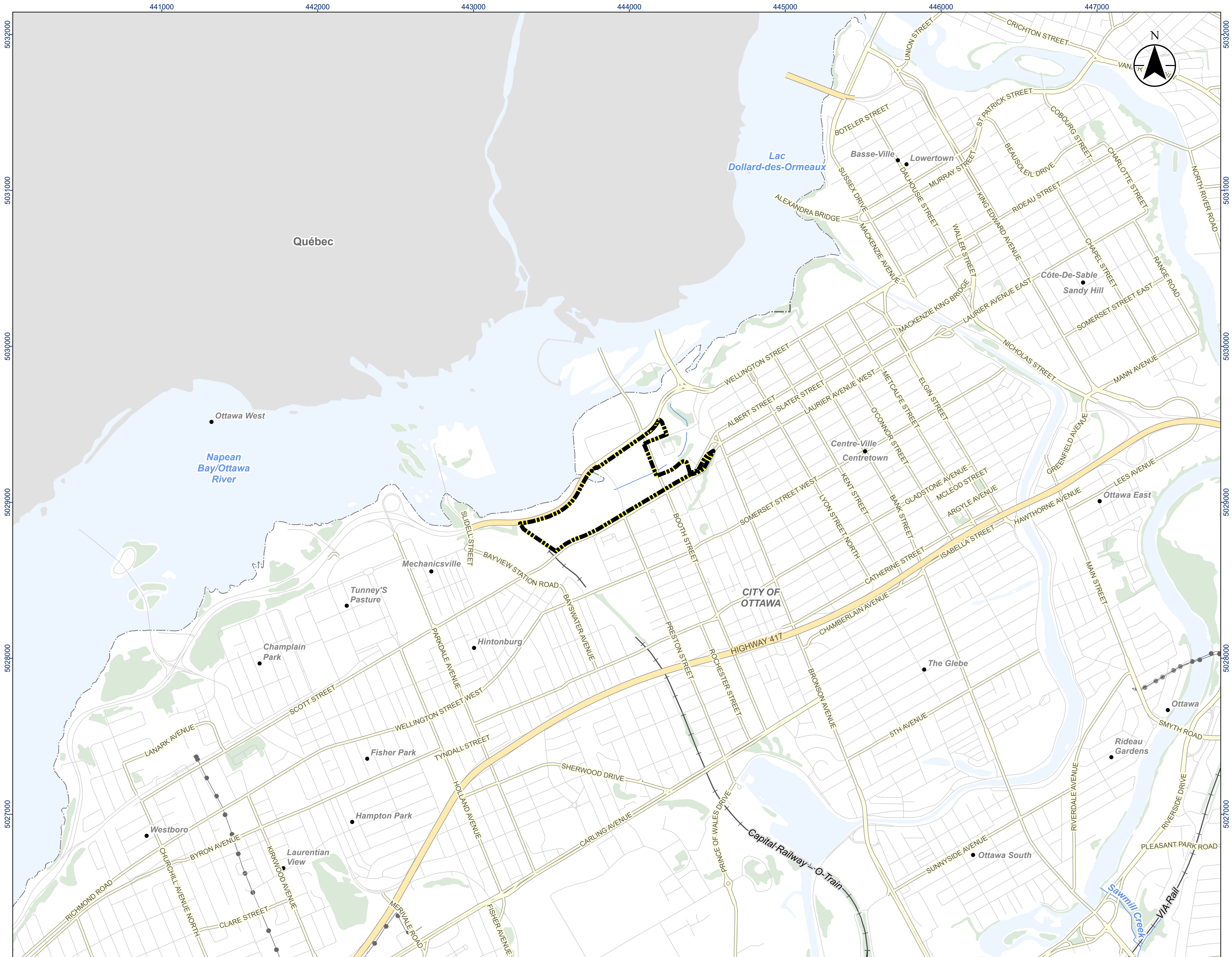
HIA	Heritage Impact Assessment
CHL	Cultural Heritage Landscape
CHVI	Cultural Heritage Value or Interest
HCD	Heritage Conservation District
MCM	Ministry of Citizenship and Multiculturalism
N/A	Not applicable
NCC	National Capital Commission
n.d.	no date
O. Reg.	Ontario Regulation
OHA	Ontario Heritage Act

1 Introduction

The National Capital Commission (NCC, the Client) has retained Stantec Consulting Ltd (Stantec) to prepare a Heritage Impact Assessment (HIA) for the implementation of the LeBreton Flats Plan of Subdivision in the City of Ottawa (the City), Ontario (Figure 1). LeBreton Flats (the Study Area) is bounded by Wellington Street and the Kichi Zībī Mīkan, formerly the Sir John A. Macdonald Parkway to the north; the Trillium Path to the west; Albert Street to the south; and portions of Booth Street, Fleet Street, Lett Street and Slater Street to the east (Figure 1 and Figure 2). The entire Study Area is bisected by the Confederation Line Light Rail Transit (LRT) system. A HIA is being completed to assess potential impacts of the proposed development on the previously identified and potential built heritage resources and cultural heritage landscapes (CHL). The HIA will recommend mitigation measures based on the proposed site development, where applicable.

This HIA follows the City of Ottawa's *A guide to preparing Heritage Impact Assessments* (City of Ottawa n.d.). The preparation of this report will also be guided by the Ministry of Citizenship and Multiculturalism's (MCM) Info Sheet #5 in *Heritage Resources in the Land Use Planning Process, Cultural Heritage, and Archaeology Policies of the Ontario Provincial Policy Statement, 2005* (Government of Ontario 2006a) (Info Sheet #5). This document uses *Ontario Regulation* (O. Reg.) *9/06* for determination of cultural heritage value or interest (CHVI) (Government of Ontario 2006b) and also provides guidance on the assessment of impacts based on CHVI resulting from a proposed change. As per the guidance contained in the City's HIA Guidelines, this report contains the following components:

- General information including property address and current owner contact information
- Current property conditions, including a location plan indicating the subject property (map and aerial photograph), a concise written and visual description of the property's cultural heritage value and/or the cultural heritage value of adjacent sites, noting the level of heritage recognition
- Existing heritage descriptions including a concise written description of the context of the property, digital images documenting all cultural heritage attributes, a site plan, and relevant information from Council-approved documents
- Background research and analysis, including comprehensive written and visual research related to the CHVI of the site, a development history of the site, primary and secondary resources
- If applicable, a statement of significance identifying the CHVI and heritage attributes of the cultural heritage resource(s)
- Description of the proposed development
- Impact of the proposed development, including an assessment identifying any positive and adverse impacts the proposed development may have on the heritage value of cultural heritage resource(s)
- Alternatives, mitigation, and conservation strategies
- Bibliography and listing of people contacted during study

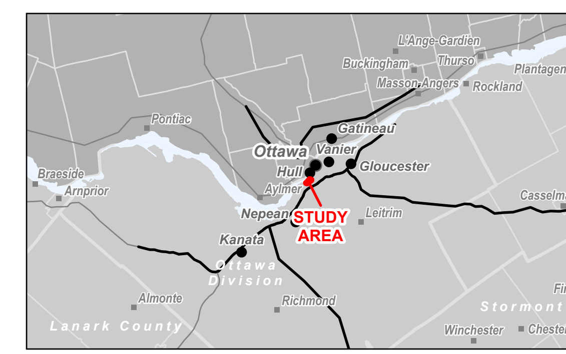


Legend
- HIA Study Area
- Expressway / Highway
- Major Road
- Minor Road
- Railway
- Hydro Line
- Watercourse (Permanent)
- Municipal Boundary - Lower Tier
- Waterbody
- Wooded Area

0 500 1,000 m

1:25,000 (At original document size of 11x17)

Notes
1. Coordinate System:NAD 1983 UTM Zone 18N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.



Project Location
Ottawa, ON

160401780 REVA
Prepared by tcoghlan on 2024-10-24
Technical Review by ABC on yyyy-mm-dd

Client/Project
National Capital Commission
LeBreton Flats Plan of Subdivision
Cultural Heritage Impact Statement

Figure No.
1

Title
Location of the Study Area

Stantec

Legend

HIA Study Area

0 100 200 m

1:5,000 (At original document size of 11x17)

Notes

1. Coordinate System:NAD 1983 UTM Zone 18N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
3. Imagery: Maxar; Imagery flown in 2022.

Project Location
Ottawa, ON

160401780 REVA
Prepared by tcoghlan on 2024-10-24
Technical Review by ABC on yyyy-mm-dd

Client/Project
National Capital Commission
LeBreton Flats Plan of Subdivision
Cultural Heritage Impact Statement

Figure No.
2

Title
Project Location

2 Methodology

2.1 Policy Framework

2.1.1 Planning Act

The *Planning Act* provides a framework for land use planning in Ontario, integrating matters of provincial interest in municipal and planning decisions. Part I of the *Planning Act* identifies that the Minister, municipal councils, local boards, planning boards, and the Municipal Board shall have regard for provincial interests, including:

> *(d) The conservation of features of significant architectural, cultural, historical, or scientific interest*
> (Government of Ontario 1990)

2.1.2 The Provincial Policy Statement

The Provincial Policy Statement (PPS) was updated in 2020 and is intended to provide policy direction for land use planning and development regarding matters of provincial interest. Cultural heritage is one of many interests contained within the PPS. Section 2.6.1 of the PPS states that, "significant built heritage resources and cultural heritage landscapes shall be conserved" (Government of Ontario 2020).

Under the PPS definition, conserved means:

> *The identification, protection, management and use of built heritage resources, cultural heritage landscapes and archaeological resources in a manner that ensures their cultural heritage value or interest is retained. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/or heritage impact assessment that has been approved, accepted, or adopted by the relevant planning authority and/or decision maker. Mitigative measures and/or alternative development approaches can be included in these plans and assessments*

Under the PPS definition, significant means:

> *In regard to cultural heritage and archaeology, resources that have been determined to have cultural heritage value or interest. Processes and criteria for determining cultural heritage value or interest are established by the Province, under the authority of the Ontario Heritage Act.*

Under the PPS, "protected heritage property" is defined as follows:

> *property designated under Parts IV, V or VI of the Ontario Heritage Act; property subject to a heritage conservation easement under Parts II or IV of the Ontario Heritage Act; property identified by the Province and prescribed public bodies as provincial heritage property under the Standards and Guidelines for Conservation of Provincial Heritage Properties; property protected under federal legislation, and UNESCO World Heritage Sites.*
> (Government of Ontario 2020)

2.1.3 City of Ottawa Official Plan

The Ministry of Municipal Affairs and Housing has issued a Notice of Decision to approve the City's New Official Plan, adopted by By-law 2021-386, and has subsequently repealed the previous Official Plan. The City has specific policies pertaining to the management of cultural heritage resources in its New Official Plan (City of Ottawa 2021). Cultural Heritage Resource Policies are contained within the New Official Plan under Volume 4, Section 4.5. The following are applicable to this CHIA:

> *4.5.2 2) Where development or an application under the Ontario Heritage Act is proposed on, adjacent to, across the street from or within 30 metres of a protected heritage property, the City will require a Heritage Impact Assessment if there is potential to adversely impact the heritage resource. The HIA will be completed according to the Council approved guidelines for HIAs, as amended from time to time.*
>
> *4.5.2 3) Heritage designation is, in part, intended to ensure contextually appropriate development and is not intended to discourage intensification or limit housing choice. Elements of the built form, including height, scale, and massing, of such development shall ensure that the defined cultural heritage value and attributes of the property or HCD will be conserved, while balancing the intensification objectives outlined throughout this Plan.*
>
> (City of Ottawa 2021)

2.1.4 The National Capital Act

The *National Capital Act* is the document through which the mandate of the NCC is established. The mandated is to build a great Capital for Canadians, specifically by preparing plans for and assist in the development, conservation and improvement of the National Capital Region in order that the nature and character of the seat of the Government of Canada (Government of Canada 1985). This includes:

- Coordinating the policies and programs of the Government of Canada respecting the organization, sponsorship or promotion by federal departments of public activities and events related to the National Capital Region (NCR); and
- Approving the design of buildings and land use, as well as any changes in use relating to federal lands in the NCR.

(Government of Canada 1985)

2.1.5 The Plan for Canada's Capital

The *Plan for Canada's Capital, 2017–2067* is a document that guides the long-term planning of the Capital. The Plan guides development of federal lands in the National Capital Region and serves as the foundation for all NCC planning work. The Plan was approved in 2017 and has a series of key policy directions that fall under three main goals:

- **Inclusive and meaningful:** A capital that preserves and cherishes national symbols, while respecting Indigenous heritage

- **Picturesque and natural:** A capital that values public green space, and promotes environmental sustainability
- **Thriving and connected:** A capital whose networks extend around the globe

The development of LeBreton Flats is identified as a milestone project that is to be implemented by between 2017 and 2067.

(NCC 2017)

2.2 Ontario Heritage Act

The criteria for determining CHVI is defined by *O. Reg. 9/06* as amended by *O.Reg. 569/22* (Government of Ontario 2006b). In order to identify CHVI at the local level at least two or more of the following criteria must be met:

1. *The property has design value or physical value because it is a rare, unique, representative, or early example of a style, type, expression, material, or construction method.*
2. *The property has design value or physical value because it displays a high degree of craftsmanship or artistic merit.*
3. *The property has design value or physical value because it demonstrates a high degree of technical or scientific achievement.*
4. *The property has historical value or associative value because it has direct associations with a theme, event, belief, person, activity, organization, or institution that is significant to a community.*
5. *The property has historical value or associative value because it yields, or has the potential to yield, information that contributes to an understanding of a community or culture.*
6. *The property has historical value or associative value because it demonstrates or reflects the work or ideas of an architect, artist, builder, designer, or theorist who is significant to a community.*
7. *The property has contextual value because it is important in defining, maintaining, or supporting the character of an area.*
8. *The property has contextual value because it is physically, functionally, visually, or historically linked to its surroundings.*
9. *The property has contextual value because it is a landmark.*

(Government of Ontario 2006b)

2.3 Field Program

A site assessment of the Study Area was undertaken on July 14, 2023, by Christian Giansante, Cultural Heritage Specialist with Stantec. The site assessment was also attended by representatives from the NCC and other members of the Stantec project team. The weather conditions were warm and with a slight breeze. Photographs were taken on Canon EOS Rebel T7 at a resolution of 300 dots per inch and 6000 by 4000 pixels.

2.4 Assessment of Impacts

The assessment of impacts is based on the impacts defined in the MCM Infosheet #5. Impacts to heritage resources may be direct or indirect.

Direct impacts include:

- *Destruction of any, or part of any, significant heritage attributes or features*
- *Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance*

Indirect impacts do not result in the direct destruction or alteration of the feature or its heritage attributes, but may indirectly affect the CHVI of a property by creating:

- *Shadows that alter the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden*
- *Isolation of a heritage attribute from its surrounding environment, context or a significant relationship*
- *Direct or indirect obstruction of significant views or vistas within, from, or of built and natural features*
- *A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces*
- *Land disturbances such as a change in grade that alters soil, and drainage patterns that adversely affect an archaeological resource*

(Government of Ontario 2006a)

In addition to direct impacts related to destruction, this HIA also evaluates the potential for indirect impacts resulting from the vibrations due to construction and the transportation of project components and personnel. This was categorized together with land disturbance. Although the effect of traffic and construction vibrations on historic period structures is not fully understood, vibrations may be perceptible in buildings with a setback of less than 40 metres from the curbside (Crispino and D'Apuzzo 2001; Ellis 1987; Rainer 1982; Wiss 1981). The proximity of the proposed development to heritage resources was considered in this assessment.

2.5 Mitigation Options

Mitigation options in this CHIA were developed using those provided in the MCM Infosheet #5. The MCM Infosheet #5 mitigation options include, but are not limited to:

- *Alternative development approaches*
- *Isolating development and site alteration from significant built and natural features and vistas*
- *Design guidelines that harmonize mass, setback, setting, and materials*
- *Limiting height and density*
- *Allowing only compatible infill and additions*
- *Reversible alterations*
- *Buffer zones, site plan control, and other planning mechanisms*

(Government of Ontario 2006a)

3 Site History

3.1 Introduction

The City of Ottawa is built on the unceded territory of the Anishinabe Algonquin, who have lived on the territory for millennia. As part of Crawford's Purchases, the city was part of a large territory of land that the Crown bestowed on British loyalists that fought during the American Revolution (1765 – 1791), rewarding them for their allegiances and given without entering into a formal treaty with Anishinabe Algonquin peoples.

3.2 Post-Contact Indigenous Resources

The Ottawa River and most of its major drainage tributaries were controlled by the various Algonquin bands that occupied the Ottawa River Valley (Day and Trigger 1978; Whiteduck 2002). The Algonquin homeland is traditionally identified as the portion of the Ottawa River drainage between the Long Sault Rapids (or Point d'Orignal) at present day Hawkesbury in the south, and Lake Nipissing in the north (Holmes 1993). Major tributary rivers and their respective drainage basins were occupied and controlled by identified Algonquin bands (Morrison 2005). However, the Rideau and Gatineau rivers appear to have been major exceptions to that generality. The Rideau River watershed was undoubtedly used in the early Contact period (Fox and Pilon 2016) as Champlain mentions Indigenous use of the river, even though he himself did not travel along it (Bourne and Bourne 2000).

Even before direct contact had been made with Europeans, the Algonquin had been active in the fur trade, acting as intermediaries between Indigenous procurers of furs in the north and west and those Indigenous groups that were in direct contact with European traders (Holmes 1993). This role was one that was already in place before the European fur trade was initiated, given their position along, and control over, a major water transportation route (Morrison 2005). The Huron traded corn, cornmeal, and fishing nets in exchange for dried fish and furs, the latter of which the Algonquin secured from Ojibway and Cree living further north (Morrison 2005). The growing fur trade and the designation of animal skins as money led to changes in economic and social organization patterns. After the initial excursions of Samuel de Champlain into the Algonquin territory in 1613 until 1615 the Algonquin played a major role in the trade between the Huron and the French, and actively worked against Champlain making a trip to the Huron territory (Day and Trigger 1978). When direct trade between the Huron and French eventually occurred, and the Huron and French were permitted to use the Ottawa River as a travel route, they were subject to tolls by the Kichesippirini, who occupied the region around present-day Morrison Island and controlled water traffic up and down the river from their position at that narrows in the river (Hessel 1993; Morrison 2005).

Increased trade along the Ottawa River attracted attention from Iroquois groups south of the St. Lawrence River. However, the alliance of Algonquin, Huron, and French minimized Iroquois raiding, and various treaties were enacted between the Algonquin and the Mohawk Iroquois during the 1620s and 1630s (Day and Trigger 1978). In the latter part of the 1630s, however, the Algonquin attempted to trade directly with the Dutch, who had been trading partners with the Mohawk, and this led to a new outbreak of hostilities between Mohawk and Algonquin (Day and Trigger 1978). After 1639, the Mohawk began accumulating

English, and then Dutch, firearms that gave them considerable advantage over the Algonquin, whose French trade partners had initially determined to trade no firearms and only provide them to those who had been baptized (Trigger 1985). Conflict continued to greater and lesser degrees throughout the 1640s, but by the early 1650s most of the Ottawa River Valley Algonquin had either sought refuge in Québec, such as at Trois Rivières, or had removed themselves to the upper parts of their territory, in present day Algonquin Park (Hessel 1987).

In 1649, the Huron-French fur trade collapsed, and the Five Nations Iroquois raided and destroyed the French Mission at Ste. Marie near Georgian Bay and several Huron villages. Huronia was abandoned, with the surviving Huron destroying their own remaining villages and moving to what is now the province of Québec. The Algonkian-speaking communities were briefly dispersed from the Ottawa Valley from 1650 to 1675, and were replaced as middlemen by the Odawa people, who were later in turn replaced by the French *coureur de bois*. Further colonization of eastern Ontario and Québec led to more changes in the fur trade. However, after the merger of the Northwest Company and Hudson's Bay Company in 1821, the fur trade routes were diverted north to Hudson's Bay (Kennedy 1961:6).

At the turn of the 18th century, the French interests in the fur trade had been sufficiently disrupted to a level that a conclusion of a treaty with the Iroquois was required, and Algonquin and Nipissing representatives were on hand in Montréal when that treaty was made (Holmes 1993). While this should have allowed for the resumption of Algonquin occupation of the whole of the Ottawa River again, the protracted hostilities with the Iroquois and the effects of the European based disease epidemics had resulted in a population decline that had caused significant changes to social organization (Morrison 2005). During the first part of the 1700s, there were Algonquin settlements along the Gatineau River and there were seasonal occupants around Lake of Two Mountains, near Montréal (Holmes 1993). By 1740, a map of Indigenous peoples in the known Canada identified the Nipissings on their namesake lake, Algonquins on the Liéve River in present day Québec and Algonquins, Nipissings and Mohawks at Lake of Two Mountains (Holmes 1993). No other Indigenous groups, Algonquin or otherwise, were identified as living in the Ottawa River valley (Holmes 1993).

At the conclusion of the Seven Years War in 1763, the sphere of European influence in the Algonquin homeland passed from the French to the British, who imposed restrictions on travel along the Ottawa River above Carillon (Morrison 2005). Nevertheless, the Algonquin continued to consider the river their territory and claims and petitions to that regard were made to the British colonial government (Holmes 1993). The *Proclamation of 1763* was supposed to protect the Algonquin territory from further settlement by Euro-Canadians; however, the British loss in the American Revolutionary War, and the resultant influx of loyalists to the British Crown after the war, meant that new lands were required for settling these loyalists and land was purchased in what is now eastern Ontario. This purchase was made with the Mississauga, and not the Algonquin (Morrison 2005:31).

Even though the lands had supposedly been 'surrendered' by the Mississauga, early Euro-Canadian settlers along the Ottawa River documented the continued presence of Algonquins throughout the territory (Hessel 1987:70). In 1819, Alexander McDonnell signed a treaty with some Algonquin that allowed him to cut timber between the Indian and Mississippi rivers and to float the resultant log rafts down the Bonnechere and Madawaska rivers. In 1837, a government Order-in Council acknowledged both the continued presence of Algonquins within the lower Ottawa valley and their historical claim to a

large territory. In 1840, Reverend William Bell, a Presbyterian circuit preacher, met an Algonquin settlement along the Madawaska River near present-day Stewartville. These and other encounters testify to the continued occupation of the valley by Algonquin populations.

Despite the attempts to limit the movement of Algonquin people through their traditional territory and encouragement to permanently settle in one location (e.g., at Oka), at the start of the 19th century Algonquins were still largely living on the land and practicing their traditional livelihood of hunting and trapping (Black 1989:64). For the most part, they were on the land of all but a brief period of two to three months of the year, when they would gather at Oka (Black 1989:65), including even those who had converted to Christianity (Morrison 2005:31). At Oka, it was noted that the Iroquoian population was heavily involved in agriculture and the wage labour economy, but only Algonquin women and elderly men were involved in cultivation pursuits, and in only a limited way at that (Black 1989:64). During the early part of the 19th century, tensions between Algonquin, Nipissing, and Iroquoian inhabitants increased at Oka (McGregor 2004:167).

In 1820, French traders from Montréal opened a trading post where the Desert River (Kitigan Zibi) met the Gatineau River. For many Algonquin families, it was preferable to conduct their trade at this post and spend their summer months in that region, rather than continue on to Oka (McGregor 2004:163). Beginning in the 1830s, those Algonquin families who were spending time in that region began clearing some small parcels of land to settle on when they were not in the bush (McGregor 2004:167). Eventually, the Crown was petitioned for a reserve of approximately 60,000 acres (24,000 hectares) in the Kitigan Zibi area, largely due to the efforts of Chief Luc-Antoine Pakinawatik, who had to indicate to government officials that the land was needed for farming as hunting and trapping were on the decline (McGregor 2004:172).

The decline of hunting and trapping was precipitated by the increase in farming and lumbering activities practiced by Euro-Canadian settlers within the Ottawa River valley, which drastically altered the landscape (Black 1989:65). Nevertheless, Algonquin hunters and trappers continued to ply their traditional trades. As the fur trade continued to decline in importance through the 19th century, the closure or amalgamation of trading posts within the Ottawa River drainage resulted in the movement of families to new post locations, and band membership through the latter part of the 19th century became very fluid, and congregation at more favourable locations increased (Black 1989:66-67).

One of those more favourable locations was at Golden Lake (Pikwakanagan), on the Bonnechere River, which was a summer gathering place within the wider winter hunting grounds (Morrison 2005:33). In September 1857, the Crown Lands Agent sent the government a petition from several Algonquin families for a grant of 200 acres per family along the shoes of the lake. In 1864, the government approved the sale of 1,561 acres (631 hectares) of land, which became the community of Pikwakanagan (Hessel 1987:72).

Although Algonquins continued to become increasingly congregated in fewer locations throughout the Ottawa River drainage area (Hessel 1987:85), traditional activities, such as canoe building, carried on into the early 20th century at Algonquin communities such as Pikwakanagan, Kitigan Zibi and Lac Barrière (Gidmark 1988:75). Moreover, these canoes were used to carry on with hunting and trapping, and for transportation over long distances (Gidmark 1988:75). Despite the continuity of traditional pursuits practiced by some, by the start of the 20th century many Algonquin had become incorporated into the wage labour economy (Black 1989:62). While urban and industrial development were slower to affect the lands where reserves had been established, by the 1950s the ecological changes wrought by lumbering and mining, in conjunction with the drop in prices for furs and other traditional products, the change to a wage labour model had become firmly established (Montpetit 1996:214). Additionally, the opportunities for wage labour on reserves was in general underdeveloped, resulting in either a high degree of underemployment or the need to seek opportunities off-reserve, including, for some, settling in urban centres (Montpetit 1996:215). Combined with the continual growth in large and small urban centres along the Ottawa River, the relationship of the Algonquin to their traditional territory began to be harder to identify among non-Indigenous populations. However, in 1983 the Algonquins of Pikwàkanagàn First Nation initiated a land claim process, formally submitting a petition and supporting research to the Government of Canada in 1983 and the Government of Ontario in 1985. The Province of Ontario accepted the claim for negotiations in 1991, and the Government of Canada joined the negotiations in 1992 (Algonquins of Ontario [AOO] no date [n.d.] a). Moreover, the Algonquin have become increasingly involved in the land development process in the Ottawa Valley, and in the urban National Capital Region, raising both the knowledge of Algonquin ties to the land and the Algonquin profile in the wider community (AOO n.d.b).

3.3 Survey and Settlement

Recorded Euro-Canadian history of the area begins in 1610, when Étienne Brûlé travelled up the Ottawa River and made note of the waterfalls located northwest of the study area (DeVolpi 1964). Champlain followed in 1613, and subsequently named them the Chaudière Falls.

Despite the early mention of the area in European colonial accounts, the Ottawa region was not settled by colonists of European decent until the early 1800s, when Philemon Wright arrived from Boston with a small group of settlers and established a community on the north side of the Ottawa River (Holzman and Tosh 1999; DeVolpi 1964; Nagy 1974). He started trading timber in 1806. The region became known for the square timber trade. Thereafter, European settlers slowly began to enter the region (Nagy 1974). The first survey of Nepean Township was undertaken in 1793 by Deputy Surveyor John Stegman, two years after the division of Upper and Lower Canada (Past Recovery Archaeological Services [PRAS] 2012).

3.3.1 19th Century Development

In 1809, the Crown granted Robert Randall, a British loyalist, the majority of land now known as LeBreton Flats, (OnLand 2023). His vision was to harness the Chaudière Falls to create a prosperous milling industry but was ultimately short lived as he was soon imprisoned in debtor's jail, where he remained for over a decade, into 1820 (Deachman 2019; OnLand 2023).

The Study Area was desirable for its proximity to the Chaudière Falls and was surveyed in 1816 for a potential canal site, and again in 1820 for a military storehouse (Deachman 2019). John Le Breton,the namesake of the area, purchased the land from Randall, preventing the colonial military from using its strategic location (Deachman 2019). The location is notable for its location on the Ottawa River in proximity to the Chaudière Falls and Richmond Landing, the main transit depot for military settlements in Perth and Richmond(Roberts 2023).Le Breton was well known for his military career and as a landowner in Ottawa. He had several military successes throughout the end of the 18th century in the Royal Newfoundland Fencible Regiment, becoming lieutenant in 1807 (Roberts 2023) The Regiment was part of a larger defence measure enacted by the British Crown to protect British colonies in North America from French threats during the Napoleonic Wars (The Royal Newfoundland Regiment Museum 2023). During the War of 1812, Le Breton participated in nine actions with distinction. Le Breton was later severely injured at the Battle of Lundy's Lane in 1814, a pivotal battle in the war that prevented further American incursion into Upper Canada (Roberts 2023; Turner 2015).

Shortly after purchasing the land, Le Breton tried to sell it for 3,000 pounds, attempting to turn a large profit from the sale, believing the land to be in high demand by the military for its strategic position along the Ottawa River, but was ultimately refused (Deachman 2019). This event would occupy much of Le Breton's life as he retained his ownership of the land for some two decades but was legally challenged by Randall and Lord Dalhousie. By 1828, the Flats were in high demand given their proximity to the newly constructed Rideau Canal and the city of Bytown, now Ottawa, and Le Breton was able to subdivide his property into many parcels (Roberts 2023). Le Breton married in 1832 and he continued to sell parcels of his land holdings. Following the death of his wife about a decade later, Le Breton moved to Toronto where he remained until his death in 1848. He left his estate to his nieces who erected a stone memorial at his grave is St James's Cemetery in Toronto (Roberts 2023).

The LeBreton Flats area quickly became an industrial hub of lumber mills, starting with Le Breton who built several lumber mills in the area and would go on to host several other industries like various flour mills, metal works, and later Ottawa Electric Railway Company and Electric Lighting Company (Roberts; 2023). The neighbourhood was home to many working-class families who worked at the mills nearby. LeBreton Flats was originally part of Nepean municipality until incorporation into the City of Ottawa in 2001 (Welch; 2015). Following the Carleton Country fire of 1870 and the Great Chicago Fire of 1871, combined with a desire to provide clean drinking water, the Ottawa City Council to engage Thomas Coltrin Keefer to oversee the design and construction of the Water Works building and aqueduct in 1872 (City of Ottawa 2024).

Industry continued to develop throughout the 19th century with several notable Canadian industries dominating the landscape at the LeBreton Flats. Lumber was the largest industry, attracting lumber men such as J.R Booth, Henry Bronson, W.G. Perley, John Harris and E.B. Eddy. Booth was the most prosperous of the industrialists who settled near the Chaudière Falls, often cited as personally developing Ottawa's economy (Deachman; 2017). By 1890, Booth was the largest lumber producer in the world; his company's timber was used in both the Mauretania and Lusitania Ocean liners and in the Parliamentary Library (Deachman 2017). In the year of his death, J.R Booth was estimated to be worth $44 million, equivalent to $600 million today. Booth was vital to the development of Ottawa's economy. His massive company employed about 6,000 employees working both at the mills and the bush operations harvesting the lumber, including many who lived in LeBreton Flats (Deachman 2017). Booth even lived in LeBreton

Flats prior to the devastating fire of 1900, at the corner of Wellington and Preston (Powell 2023). Booth invested in several entities within Ottawa, including properties, and he created his own rail line, the Canada Atlantic Railway, from an amalgamation of smaller existing rail lines and others he built to move lumber faster. Booth owned a large stretch of forest into Georgian Bay and Northern Quebec, one of the largest lumber companies at that time (Deachman 2017). Booth remained prosperous until his death by pivoting from solely lumber production that dominated the 19th century into pulp and paper, which became more integral in the 20th century (Deachman 2017).

3.3.2 20th Century Development

On April 26, 1900, a devastating fire started in Hull, Quebec and jumped across the Ottawa River into LeBreton Flats, burning nearly the entire neighbourhood to the ground (Plate 1). The two cities were not only geographically close to one another on the Ottawa River, but also deeply connected by their shared industry on the River, Albert, Victoria, and Chaudière islands. After a fire started in a small frame house due to a chimney malfunction, portions of the two cities were quickly engulfed in flames. In Hull, the house fire was located in a congested area of similar wooden houses, which contributed to its quick spread into neighbouring houses and barns. The fire started at 10:30 am and by noon it had spread and destroyed all the houses along Chaudière, Wright, Church, Dupont, Principal, Wellington, and Duke streets as well as the post office, the Imperial Hotel and the Anglican Church, the courthouse and fifteen stores, all before the fire department even arrived (Shorter 1962).

Plate 1: Great fire of Ottawa 1900 (Library and Archives Canada 1900)

By 2:00 pm the fire jumped across the Ottawa River igniting several mills and lumber yards in the space between the two cities. Baldwin Iron Works, the Victoria Foundry, the Ottawa Saw Works, the Martin and Warnock Flour Mills, and the flour and grain elevators of the McKay Mills Company were all destroyed (Powell 2020). The Canadian Pacific Railway Station located on the Flats was destroyed, as were the Ottawa Electric Railway Company and the Electric Lighting Company, which cut off power to the city of Ottawa (Powell 2020) By the evening, the fire moved south as far as Wellington Street and destroyed several upper-class residences of industrialists who owned mills in the area, including J.R. Booth's house (Plate 2).

Plate 2: J.R. Booth's Residence in LeBreton Flats 1881 (Library and Archives Canada 1881)

After sundown, the fire finally abated, partly assisted by the reduction in wind, which had blown strongly all day. Only two industrial works survived the fire on the islands on the Ottawa River; Bronson and Weston Carbide works, only because it was made of incombustible material, and J. R. Booth's sawmills, due to their own water system, installed a few years prior due to a previous fire (Shorter 1962) (Plate 3 and Plate 4). Much of Hull was destroyed. Nearly all public buildings except for the Roman Catholic Cathedral were lost. In total 3,200 buildings were destroyed, 1,900 in Ottawa and 1,300 in Hull. Millions of dollars of board feet of lumber were burned. A total of 14,159 people across both cities were left homeless, many also jobless as the mills burned (Shorter 1962). Estimates of losses range from $10 million to $15 million, equivalent to $300-450 million today (Powell 2020).

Plate 3: Ruins of Bronson Mill 1900 (Library and Archives Canada 1900)

Plate 4: E.B. Eddy Match Rear Match Factory Ottawa 1900 (Library and Archives Canada 1900)

Shortly after the fire, a great relief effort was launched by the government, with support coming from Britain, other British colonies, and several provinces in Canada, which all donated money to help rebuild

the area (Shorter 1962). By the end of 1900, 485 dwellings had been constructed in the LeBreton Flats area. LeBreton Flats, once rebuilt and functional again, remained an industrial neighbourhood and many people returned and found work again at the mills nearby. As evidenced by the 1906 topographic map of the area, LeBreton Flats was rebuilt in six years after the fire, the area was built back up with stone/brick houses (Department of Militia and Defense 1906) Mills remained on the islands on the Ottawa River, maintaining the area's industrial ties (Figure 3). By 1925, LeBreton Flats was well-connected to the sprawling city that expanded into the previously vacant land outside the city of Ottawa (Figure 4). The Study Area remained occupied for several decades, reflecting the prosperous industry on the Ottawa River.

Following the Hull-Ottawa fire in 1900, the neighbourhood remained a working-class neighbourhood for much of the 20th century. Many of the structures had not been improved or well maintained since their reconstruction following the fire in 1900. In 1962 the residents of LeBreton Flats were given notice by the National Capital Commission to relocate. Within two years, 2,800 residents and hundred of businesses were expected to move out of the neighbourhood to make way for a new construction of government offices (Jenkins 2018; Powell 2023). 2023

Once vacated, the federal government bought up the parcels of land preventing the original residents from returning, totalling 154 acres valued at $17 million across 154 acres. Over the next decade, the entire neighbourhood was razed, and residences, shops, and the historic Ottawa West Freight Station and Tracks were dismantled (Powell 2023). The last structure to be removed was the Duke's House, formerly the Couillard Hotel in 1965 (Powell 2023). The LeBreton Flats neighbourhood was completely destroyed, as shown in the difference between the 1963 and 1971 topographic maps. In 1963, though the evacuation had begun, many of the structures remained, as well as the railway line. By 1971, the land was completely vacant, devoid of all the previous structures, roads, and railways. The milling industries remained on the islands of the Ottawa River, but all evidence of the working-class neighbourhood was gone (Figure 5 and Figure 6).

Initially, there was a clear purpose to the destruction of the neighbourhood; Prime Minister Diefenbaker wanted to build a new defence headquarters, estimated at $40 million, but that plan never came to fruition (Powell 2023). Over the decades since demolition, several plans have been made to make use of the land including for various government buildings, monuments, and parks but none of them were completed. Instead, the Flats was used for a variety of unconventional purposes. It was covered in several mounds of landfill for many years. Later, it was used for event space. (Powell 2023). In 1991, an environmental analysis revealed that the soil and water retained toxins from by-products produced from the adjacent industrial mills scrap yards, metal working plants, and rail yards from the industrial era of the site (Powell 2023).

Despite the initial plans to repurpose the land, LeBreton Flats has remained largely without purposeful use for decades. The expropriation of LeBreton Flats has widely been criticized as a purposeful removal of a low- and working- class neighbourhood given its long industrial history, and association as a poor neighbourhood so close to the National Capital (Jenkins 2008). In 2005 the Canadian War Museum opened in the north-west portion of the Flats, closest to the Ottawa River. A clean up effort was launched in 2012 to remove the toxicity found in the soil and water including replacing the topsoil costing $70 million (Powell 2023). The remediation efforts removed much of the contaminated soil along the eastern portion of the Study Area, east and north of the aqueduct, down to the bedrock.

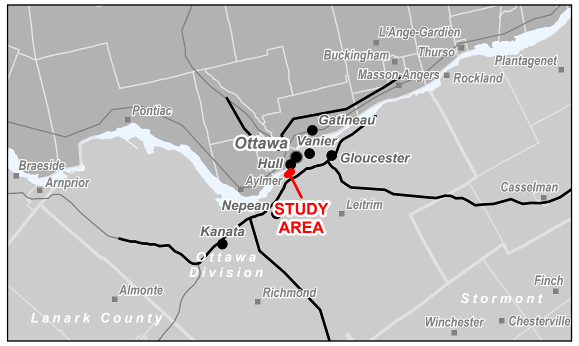
Stantec

Legend

HIA Study Area

Notes

1. Figure not to scale.
2. Putnam, Prescott, C.W. 1863. County Map of Carleton County: Halton County. Carleton: Putnam, Prescott, C.W.



Project Location
Ottawa, ON

160401780 REVA
Prepared by tcoghlan on 2024-10-24
Technical Review by ABC on yyyy-mm-dd

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National Capital Commission
LeBreton Flats Plan of Subdivision
Cultural Heritage Impact Statement

Figure No.
3

Title
Historical Mapping, 1863

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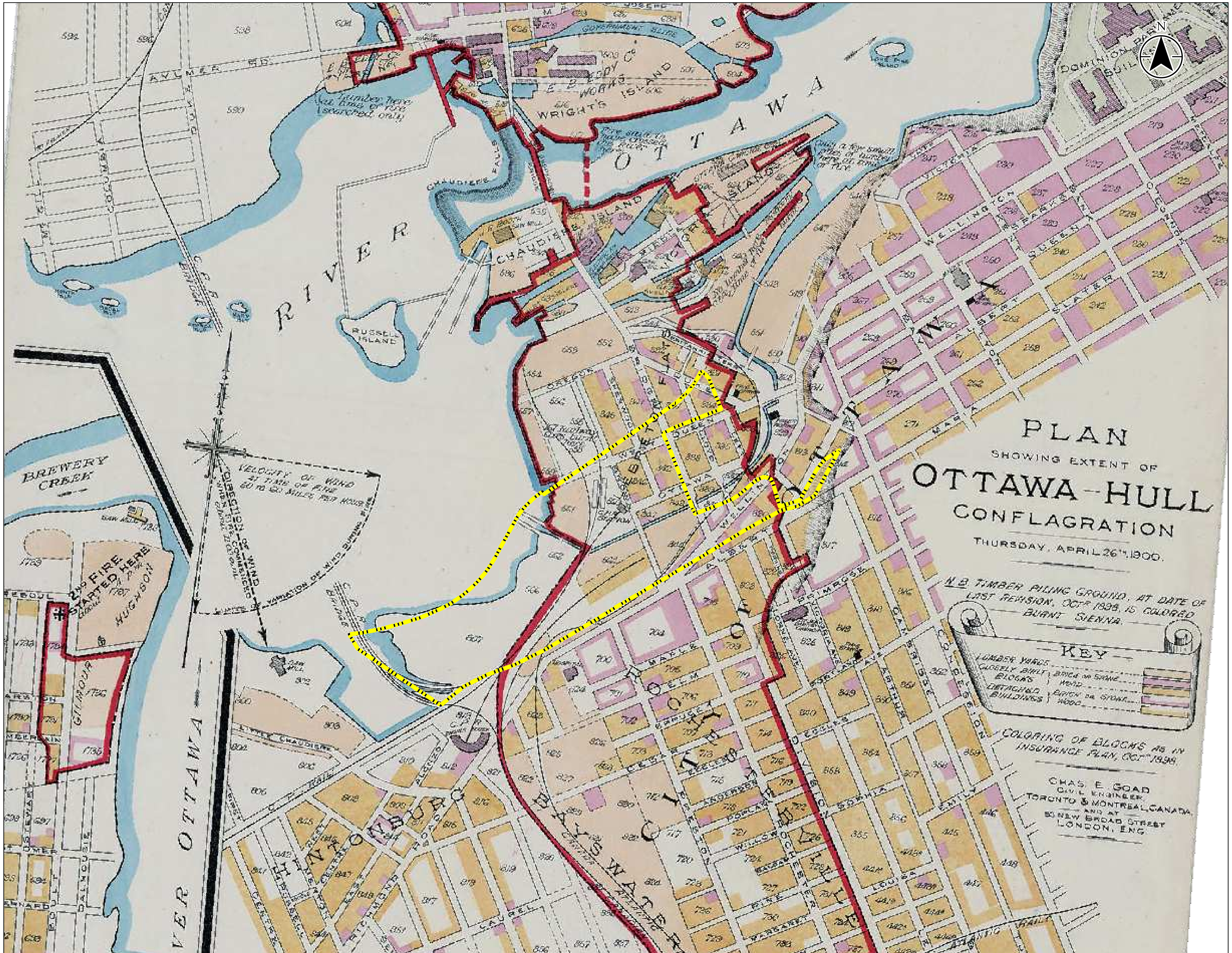

Stantec

Legend

HIA Study Area

Notes

1. Figure not to scale.
2. Chas. E. Goad. 1900. Plan Showing Extent of Ottawa-Hull Conflagration. Montreal: Chas. E. Goad.

Project Location
Ottawa, ON

160401780 REVA
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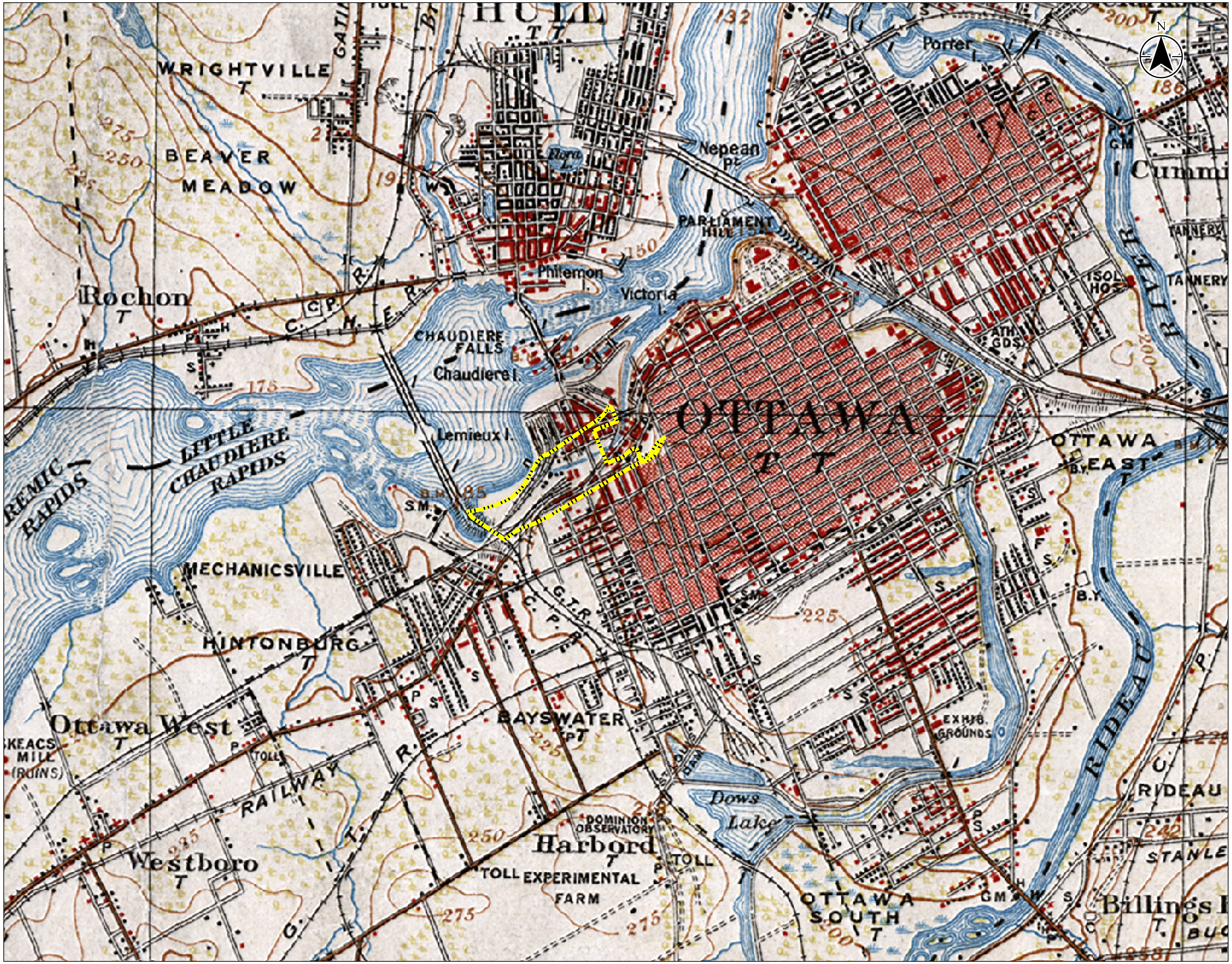
Figure No.
4

Title
Historical Mapping, 1900



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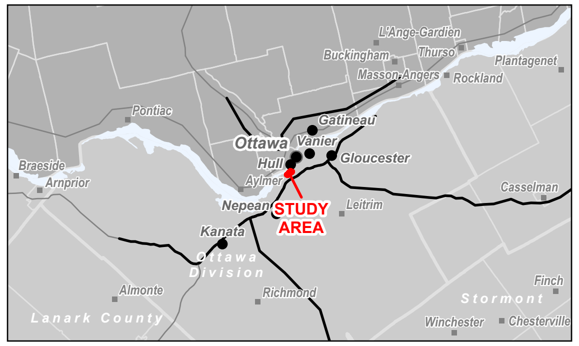
Legend

HIA Study Area

Notes

1. Figure not to scale.
2. Department of Militia and Defense. 1906. Topographic Map Ontario-Quebec, Ottawa Sheet.



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National Capital Commission
LeBreton Flats Plan of Subdivision
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Figure No.
5

Title
Historical Mapping, 1906

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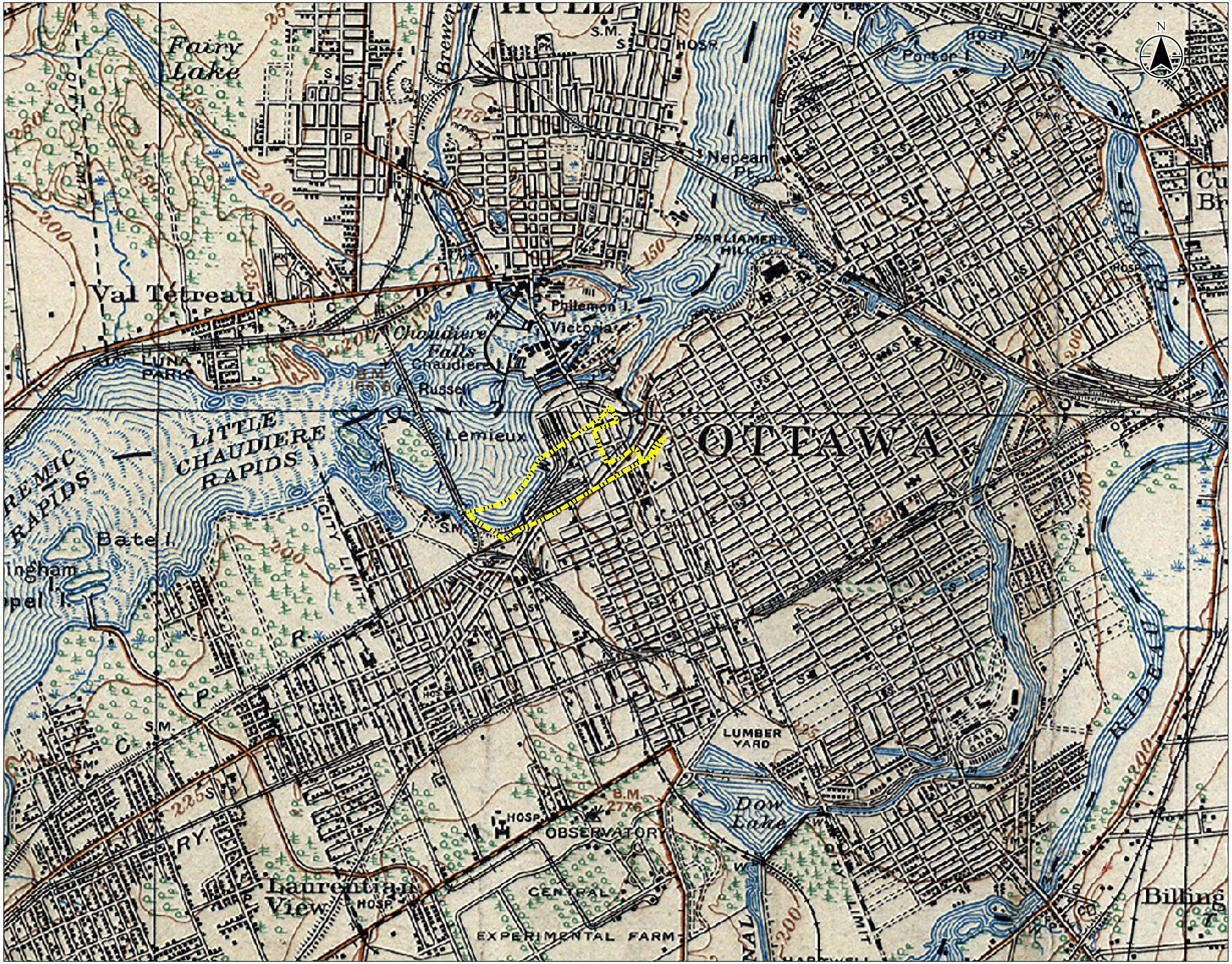

Stantec

Legend

HIA Study Area

Notes

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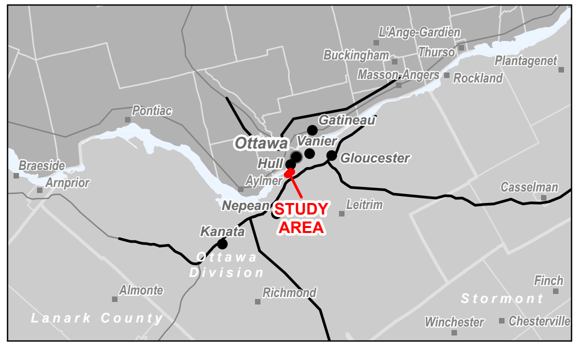

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Figure No.
6

Title
Historical Mapping, 1925

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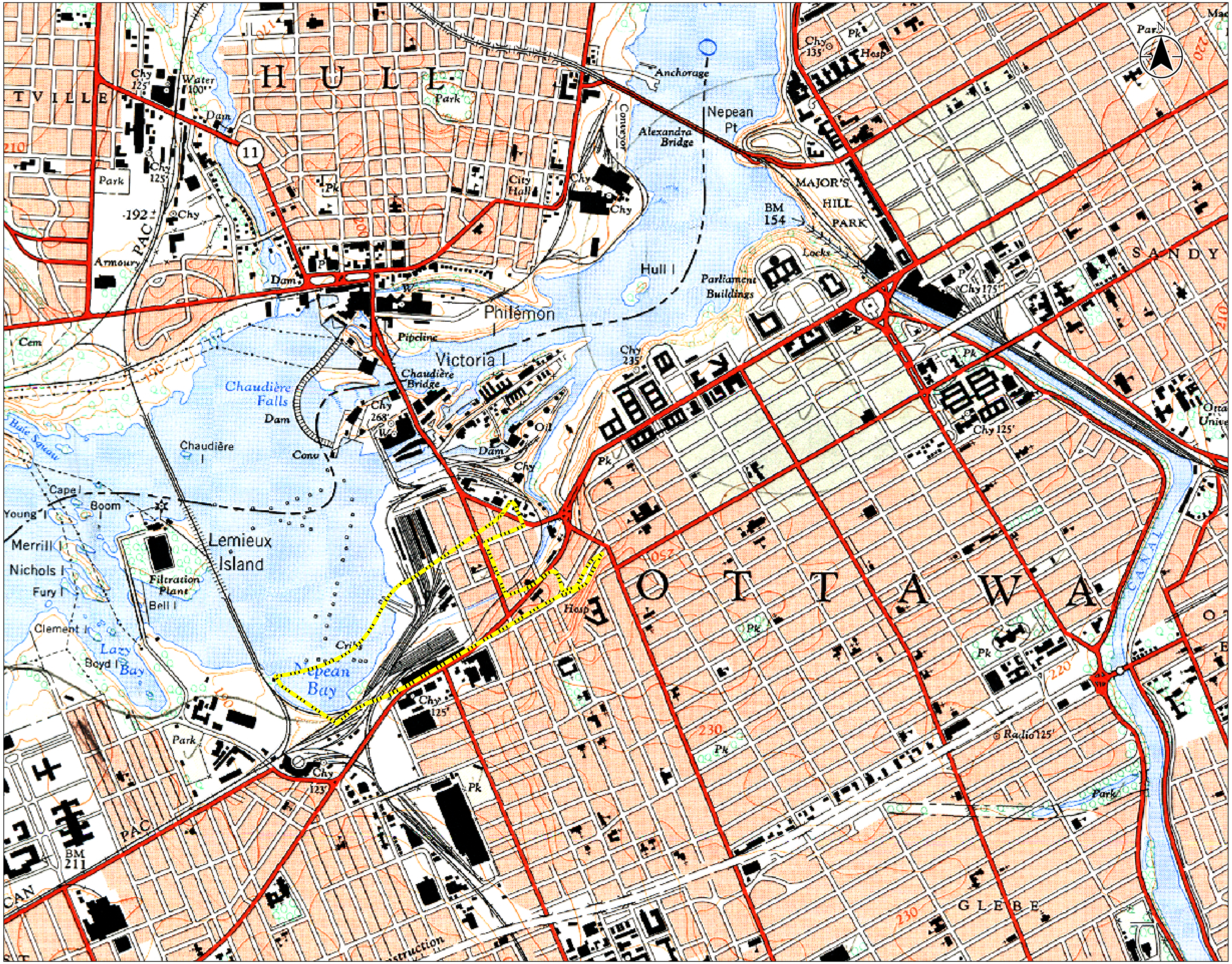

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Legend

HIA Study Area

Notes

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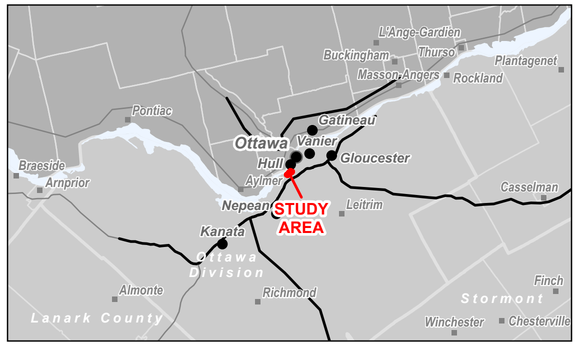

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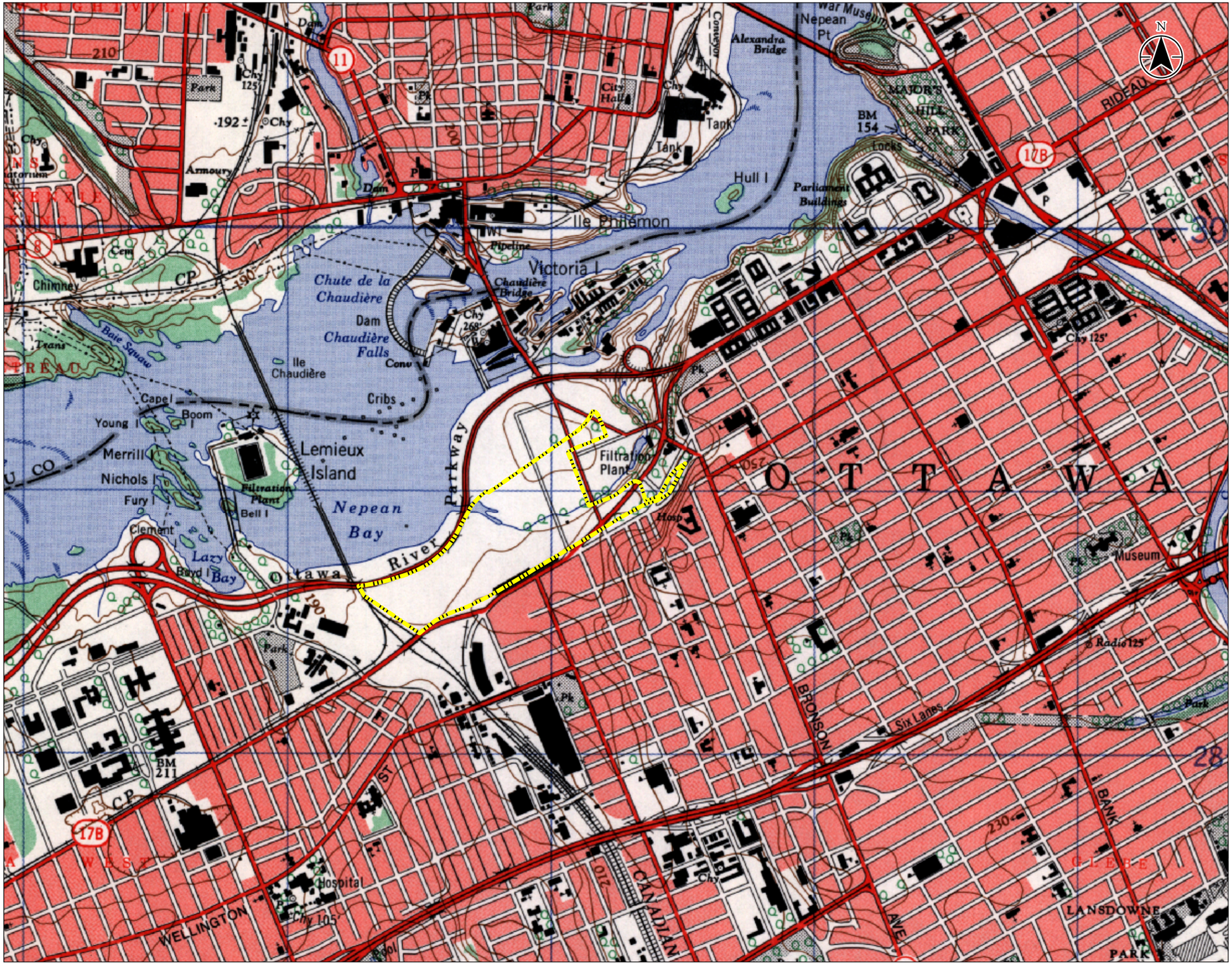
Figure No.
7

Title
Historical Mapping, 1963



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Legend

HIA Study Area

Notes

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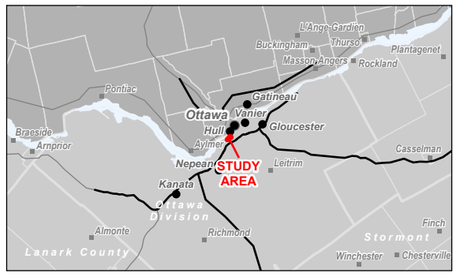
2. Department of Militia and Defense. 1971. Topographic Map Ontario-Quebec, Ottawa Sheet.



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Cultural Heritage Impact Statement

Figure No.
8

Title
Historical Mapping, 1971

4 Site Description

4.1 Landscape Context and Setting

The LeBreton Flats Study Area is bounded by Wellington Street and the Kichi Zībī Mīkan , formerly the Sir John A. Macdonald Parkway, to the north; the Trillium Path to the west; Albert Street to the south; and portions of Booth Street, Fleet Street, Lett Street and Slater Street to the east. The Study Area can be divided into two main areas of interest: open parkland to the west and undeveloped lands to the east (Figure 9). The entire Study Area is bisected by the Confederation Line Light Rail Transit (LRT) system. (Photo 4.1 and Photo 4.2)

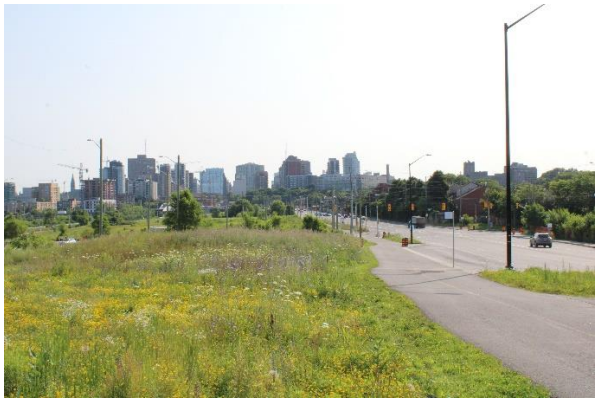

Photo 4.1: Albert Street looking east

Photo 4.2: LRT and Pimisi Station

4.1.1 Greenspace

The greenspace in the west side of the Study Area are generally bound by the Kichi Zībī Mīkan formerly the Sir John A. Macdonald Parkway to the north, the Trillium path to the west, Albert Street to the South, and the Ottawa Water Works Intake to the east. The greenspace is land that was reclaimed from the Ottawa River and the soils are contaminated. The greenspace consists of a central hill which is contains trees, smaller shrub-like vegetation, and grassed areas (Photo 4.3). There are informal seasonal walking paths that extend throughout the Parkland, however the NCC discourage use of these paths due to the presence of contaminated soils. A formal multi-use paved pathway runs parallel to the LRT and extends towards the Kichi Zībī Mīkan (Photo 4.4 and Photo 4.5).

Photo 4.3: Treed hill in greenspace

Photo 4.4: Multi-use pathway looking east from Trillium trail

Photo 4.5: Multi-use pathway looking west

4.1.2 Undeveloped Lands

The undeveloped lands to the east are bisected by the Ottawa Water Works Complex (further discussed in Section 4.2) including the open and closed aqueduct. The undeveloped lands on the east side of the study area have been excavated to the bedrock underlying LeBreton Flats (Photo 4.6 to Photo 4.8). Localized organic growth of trees and shrubs has begun to sprout on the bedrock. The only unexcavated portions of the undeveloped lands are located beneath the Vimy Place extension, adjacent to the Water Works Complex intake and around the closed aqueduct (Photo 4.9). Between the open aqueduct and the LRT is the continuation of the multi-use paved trail that extends from the open parkland (Photo 4.10 and Photo 4.11). The multi-use pathway is landscaped with seating areas and public art.

At the southwest corner of the intersection of Wellington Street and Booth Street is the Fleck Fountain Plaza (Photo 4.12). The Plaza contains an exhibit about the history of LeBreton flats and displays the Fleck Fountain which was unearthed during excavations in 2013. The interpretive display includes historical photographs and concrete stamping showing the former street names. The northeast corner of the Study Area bounded by Wellington Street, Lett Street, Booth Street and Fleet Street is currently occupied by a temporary greenspace called Pindigen Park (Photo 4.13). The park was developed by the NCC in partnership with the local Algonquin communities of Kitigan Zibi Anishinabeg and the Algonquins

of Pikwakanagan First Nation. The park is designed as a gardenesque-style public greenspace, with undulating landforms and public art and interpretive components. There is no physical representation of the built components associated with 19th and early to mid 20th century LeBreton Flats within the Study Area.

The undeveloped lands south of the LRT consist of an informal gravel parking lot and an open field (Photo 4.14).

Photo 4.6: LeBreton Flats looking northwest from Pimisi Station

Photo 4.7: LeBreton Flats looking southeast towards Pimisi Station

Photo 4.8: Excavated lands at grade

Photo 4.9: Unexcavated Vimy Place roadway north of Wellington Street

Photo 4.10: Multi-use pathway looking west towards the greenspace

Photo 4.11: Multi-use pathway looking east towards Pimisi Station

Photo 4.12: Fleck Fountain Plaza

Photo 4.13: Pindigen Park

Photo 4.14: Open field south of LRT

4.2 Ottawa Water Works Complex

The Ottawa Water Works Complex is partially located within the Study Area. It consists of the intake bay, known as Nepean Inlet, on the Ottawa River in the middle of the north side of the study area, the closed and open aqueducts that bisect the Undeveloped Lands of the Study Area, and the Main Water Works Building located outside the Study Area on Fleet Street. The Main Water Works Building is not assessed as part of this report. The intake bay consists of concrete fin walls and one headworks building (Photo 4.15). The headworks building is constructed on poured concrete and has a sign with the former name of the Regional Municipality of Ottawa-Carleton (Photo 4.16).

The open heritage aqueduct extends from the intake bay towards the Main Water Works Building. The open heritage aqueduct is built into the surrounding bedrock and is constructed of uneven stone edges that gradually slope into the Aqueduct (Photo 4.17 and Photo 4.18). Portions of the sloping edges are in a deteriorated state (Photo 4.19). The open heritage aqueduct currently has a piece of public art depicting an eel displayed in the waterbed (Photo 4.20). Additionally, there are two stone bridges that cross the open heritage aqueduct: The old Booth Street Bridge and the Broad Street Bridge (Photo 4.21 to Photo 4.23). Both bridges are low, single arch closed spandrel bridges constructed with regularly coursing stone. The arches have a keystone on each side of the bridge. The old Booth Street Bridge is located beneath the new Booth Street overpass and is adjacent to Pimisi Station. The Broad Street Bridge is closed to public access and is a remnant of the former Broad Street that passed through the LeBreton Flats neighbourhood. The closed aqueduct also extends west from the intake bay towards the Main Water Works Building (Photo 4.24). The closed aqueduct is unexcavated.

Photo 4.15: Looking northwest from Vimy Place towards Nepean Inlet

Photo 4.16: Headworks building

Photo 4.17: Open Aqueduct looking east

Photo 4.18: North wall of Open Aqueduct

Photo 4.19: Damage to stone wall

Photo 4.20: Untitled (Pimisi/Eel) sculpture by Nadia Myre, looking east

Photo 4.21: Booth Street Bridge

Photo 4.22: Broad Street Bridge

Photo 4.23: Broad Street Bridge stone detail

Photo 4.24: Unexcavated closed aqueduct

4.3 Lorne Avenue Heritage Conservation District

The Lorne Avenue Heritage Conservation District (HCD) is located southeast of the Study Area between Booth Street and Perkins Street. The HCD contains examples of early 20th century working-class dwellings. The structures are typically constructed of red brick. They generally have flat roofs with decorative cornices and simple entrance porches. The HCD is representative of what LeBreton Flats looked like before the area was levelled in the 1960s (Photo 4.25 and Photo 4.26).

Photo 4.25: Lorne Avenue looking south

Photo 4.26: Lorne Avenue looking north

Stantec

Legend

- HIA Study Area
- Photo Location and Direction
- Open Parkland
- Undeveloped Lands

0 100 200 m

1:5,000 (At original document size of 11x17)

Notes

1. Coordinate System:NAD 1983 UTM Zone 18N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
3. Imagery: Maxar; Imagery flown in 2022.

Project Location
Ottawa, ON

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Cultural Heritage Impact Statement

Figure No.
9

Title
Photo Key Plan

5 Evaluation of Cultural Heritage Value or Interest

5.1 Introduction

The criteria for determining CHVI is defined by *O. Reg. 9/06* (see Section 2.1.4). If a property meets two or more of the criteria it is determined to contain, or represent, a cultural heritage resource. Where CHVI is identified, a summary statement of cultural heritage value will be prepared, and a list of heritage attributes which define the CHVI identified. Based on the findings of Section 3 and of Section 4, it was identified that LeBreton Flats may have the potential to meet the criteria of *O. Reg. 9/06* as a Cultural Heritage Landscape (CHL). The cultural heritage evaluation of the potential LeBreton Flats Cultural Heritage Landscape against *O. Reg. 9/06* is included in Section 5.2

5.2 LeBreton Flats Cultural Heritage Landscape Evaluation

Design/Physical Value

The potential LeBreton Flats CHL includes the lands that made up the former LeBreton Flats neighbourhood and the associated lumber mills along the Ottawa River. The area was a working-class neighbourhood for much of the 20th century. However, in 1962 the residents of LeBreton Flats were given notice to relocate after the lands were expropriated by the federal government. The existing built structures, including residential, commercial, institutional, and industrial structures were demolished. No evidence remains today of the structures that were removed. Thus, the potential LeBreton Flats CHL does not demonstrate design or physical value as a rare, unique, representative, or early example of a style, type, expression, material, or construction method.

The potential LeBreton Flats CHL is an evolved CHL that was not explicitly designed to appear in its current form. There are limited built or tangible features within the CHL, but none of the remaining components demonstrate a high degree of craftmanship or artistic merit. The potential LeBreton Flats CHL is an open area consisting of an excavated landscape and undeveloped greenspace on reclaimed land. While the Ottawa Water Works Complex is recognized as a cultural heritage resource that passes through the CHL and is noted for its technical achievements, the Ottawa Water Works Complex is not representative of a high degree of technical or scientific achievement for the CHL as a whole.

Historic/Associative Value

The Ottawa River and most of its major drainage tributaries near present day LeBreton Flats were controlled by the various Algonquin bands that occupied the Ottawa River Valley. Major tributary rivers and their respective drainage basins were occupied and controlled by identified Algonquin bands. The present-day Ottawa area was used as an active trading point due to the confluence of three major rivers. Post-contact history of the area begins in 1610, when Étienne Brûlé travelled up the Ottawa River and made note of the waterfalls, which are located northwest of the study area. Champlain followed in 1613, and subsequently named them the Chaudière Falls.

Despite the early mention of the area in European colonial accounts, the Ottawa region was not settled by colonists of European decent until the early 1800s, when Philemon Wright arrived from Boston with a small group of settlers and established a community on the north side of the Ottawa River. He started trading timber in 1806. The region became known for the square timber trade. Thereafter, European settlers slowly began to enter the region. Industry developed throughout the 19th with lumber "barons" like J.R Booth, Henry Bronson, W.G. Perley, John Harris and E.B. Eddy. Booth was the largest lumber producer in the world, his company's timber was used for both the *Mauretania* and *Lusitania Ocean* liners as well as the parliamentary library. In the year of his death, J.R Booth was estimated to have $44 million, equivalent to $600 million today and was vital to the development of Ottawa's economy. In 1900, a devastating fire started in Hull Quebec and jumped across the Ottawa River into LeBreton Flats burning nearly the entire neighbourhood to the ground. Following the Hull-Ottawa Fire, the neighbourhood was quickly rebuilt remained a working-class neighbourhood for much of the 20th century until the land was expropriated by the federal government, the existing buildings were demolished, and the plans for the construction of a new headquarters for the department of transportation never materialized. Thus, the LeBreton Flats CHL is associated with significant periods of Ottawa's history from pre- and post-contact indigenous history to mid-20th century development.

Due to the changes to the CHL over the course of the 20th century, the LeBreton Flats CHL contains several excavated and unexcavated archaeological sites. The sites cover the 19th and 20th century development of the site. The excavated sites have yielded information that contributes to an understanding of the evolution of the CHL, including the discovery of elements such as the Fleck Fountain, which has been included as part of an interpretive display. As such, the unexcavated sites have the potential to yield additional information about the LeBreton Flats CHL.

The potential LeBreton Flats CHL is representative of an evolved cultural heritage landscape which has been subject to many changes over the course of the 20th century. The CHL does not explicitly reflect the work or ideas of an architect, artist, builder, design, or theorist who is significant to a community.

Contextual Value

The potential LeBreton Flats CHL is an evolved cultural heritage landscape that has experienced significant change over the course of the 20th century. The removal and demolition of the neighbourhood within the CHL over the course of the 20th century created a vast expanse of open and uninhabited space with minimal development. Many of the built and tangible components that may have contributed to the design or physical value of the CHL are no longer extant. The surrounding area has since been defined by the identification of Lorne Avenue as a Heritage Conservation District and by the construction of institutional structures such as the Canadian War Museum. Despite the lack of infrastructure and significant development, the area has retained the name "LeBreton Flats" due to its historical associations. Thus, the potential LeBreton Flats CHL continues to define the character and name of the area.

While most of LeBreton Flats was demolished following the expropriation of the lands in the late 20th century, the CHL retains some tangible components that create a physical and historical link to its surroundings. The CHL has direct associations with the presence of the Ottawa Water Works Complex, namely the open Aqueduct that extends through the CHL. The Aqueduct is crossed by the Broad Street and old Booth Street bridges which are both physical representations of historic circulation patterns associated with the former LeBreton Flats community. The bridges act as a tangible link to the late 19th and early 20th century development within the area. Additionally, remnants of roadways that formed the LeBreton Flats community are still discernible within the CHL as a link to the former community. These streets include Fleet Street, portions of Booth Street beneath the LRT overpass, and Broad Street at the location of the Broad Street Bridge.

Despite a lack of distinguishable features, the potential LeBreton Flats CHL is uniquely distinct from its surroundings. It is a conspicuous vacant area adjacent to an urban core that has borne witness to significant local change over the course of the 20th century. Its landmark nature is exemplified through the historic developments associated with the land and potential future developments that have shaped the cultural heritage landscape and the City of Ottawa as a whole. While the tangible components of the landscape are limited, the intangible associations with the historic place illustrate the evolution of changing land uses from the 19th century to the present. Thus, the LeBreton Flats Cultural Heritage Landscape is a landmark within the City of Ottawa.

Summary of O. Reg. 9/06 Evaluation

Table 1 provides a summary of the above discussion against criteria provided in O. Reg. 9/06.

Table 1: Summary of O.Reg. 9/06 Criteria

Criteria of O. Reg. 9/06		Yes/No	Comments
Design or Physical Value			
1.	Is a rare, unique, representative, or early example of a style, type, expression, material, or construction method	No	The LeBreton Flats CHL is an evolved cultural heritage landscape that has experienced significant change over the course of the 20th century. Many of the built and tangible components that may have contributed to the design or physical value of the CHL are no longer extant. The Lorne Avenue HCD, located adjacent to the LeBreton Flats CHL, is a representation of what the CHL may have looked like at one point in the 20th century. However, the HCD does not extend into the CHL. Additionally, while the Ottawa Water Works Complex passes through the LeBreton Flats CHL, its design or physical value is not representative of the CHL as a whole. Thus, the LeBreton Flats CHL is not rare, unique, representative or an early example of a style, type, expression, material, or a construction method.
2.	Displays a high degree of craftsmanship or artistic merit	No	As noted in criterion 1, the LeBreton Flats CHL is an evolved cultural landscape with few tangible components. The CHL in its current state does not demonstrate a high degree of craftsmanship or artistic merit.

Criteria of O. Reg. 9/06		Yes/No	Comments
3.	Demonstrates a high degree of technical or scientific achievement	No	As noted in criterion 1, the LeBreton Flats CHL is an evolved cultural landscape with few tangible components. While the Ottawa Water Works Complex is recognized as a cultural heritage resource that passes through the CHL, its technical and scientific achievement is not representative of the CHL as a whole.
Historical or Associative Value			
4.	Has direct associations with a theme, event, belief, person, activity, organization, or institution that is significant to a community	Yes	The LeBreton Flats CHL has direct associations with various periods associated with the history of Ottawa. Prior to and following European arrival, the area was used as a trading post due to its strategic location near the Ottawa, Gatineau, and Rideau Rivers. In the 19th and 20th centuries, the area was a hub for the lumber industry and attracted "lumber barons" such as J.R Booth, Henry Bronson, W.G. Perley, John Harris and E.B. Eddy. The milling industry at LeBreton Flats flourished in the later 19th and 20th centuries under the "barons" which supported the growth and development of the City of Ottawa. Thus, the LeBreton Flats CHL has direct associations with themes, events, people, and activities that are significant to a community.
5.	Yields, or has the potential to yield, information that contributes to an understanding of a community or culture	Yes	The LeBreton Flats CHL contains several excavated and unexcavated archaeological sites. The sites cover the pre- and post-contact indigenous history as well as the 19th and 20th century development of the site. The excavated sites have yielded information that contributes to an understanding of the development of LeBreton Flats as a working-class community in the late 19th and early 20th century. The unexcavated sites have the potential to yield additional information about the LeBreton Flats community and other ventures associated with the area, such as the lumber industry.
6.	Demonstrates or reflects the work or ideas of an architect, artist, builder, designer, or theorist who is significant to a community	No	The LeBreton Flats CHL is representative of an evolved cultural heritage landscape. The CHL has been heavily modified over the course of the 20th century and it does not explicitly reflect the work or ideas of an architect, artist, builder, design, or theorist who is significant to a community.
Contextual Value			
7.	Is important in defining, maintaining, or supporting the character of an area	Yes	As noted in criterion 1, the LeBreton Flats CHL is an evolved cultural landscape with few tangible components. The removal and demolition of the neighbourhood within the CHL over the course of the 20th century created a vast expanse of open and uninhabited space with minimal development. The surrounding area has since been defined by the identification of Lorne Avenue as an HCD and by the establishment of institutional structures such as the Canadian War Museum. Despite the lack of infrastructure and significant development, the area has retained the name "LeBreton Flats" due to its historical associations. Thus, the LeBreton Flats CHL continues to define the character and name of the area.

Criteria of O. Reg. 9/06		Yes/No	Comments
8.	Is physically, functionally, visually, or historically linked to its surroundings	Yes	While most of LeBreton Flats was demolished throughout the course of the 20th century, the CHL retains some tangible components that create a physical and historical link to its surroundings. The CHL has direct associations with the presence of the Ottawa Water Works Aqueduct that extends through the CHL. The Broad Street and Booth Street bridges are physical representations of circulation patterns associated with the historic LeBreton Flats community. Remnants of roadways that formed the LeBreton Flats Community, including ports of Broad, Booth and Fleet Streets are still discernible within the CHL. As such, the LeBreton Flats CHL has physical and historical links to its surroundings.
9.	Is a landmark	Yes	The LeBreton Flats CHL is distinct from its surroundings despite a lack of discernible features. It is a conspicuous area that has borne witness to significant local change over the course of the 20th century. Its landmark nature is exemplified through the historic and potential future developments that have shaped the cultural heritage landscape and the City of Ottawa as a whole. While the tangible components of the CHL are limited, the intangible associations with the historic place illustrate the evolution of changing land uses from the 19th century to the present. Thus, the LeBreton Flats CHL is a landmark within the City of Ottawa.

As the LeBreton Flats Cultural Heritage Landscape meets five criteria of *O.Reg. 9/06*, the CHL has CHVI. A draft statement of significance is included in Section 6.1.

6 Summary of Cultural Heritage Value

The following sections include an overview of the cultural heritage value of the identified built heritage resources and cultural heritage landscapes. The previously identified and potential cultural heritage resources are shown in Figure 10.

6.1 LeBreton Flats Cultural Heritage Landscape

Description of Property

The LeBreton Flats Cultural Heritage Landscape is located in Ottawa, Ontario. It is located adjacent to the Ottawa River and is generally bounded by Albert Street to the south, the Ottawa Water Works Intake to the west and Commissioners Street and the Ottawa Water Works Outlet to the east. The LeBreton Flats Cultural Heritage Landscape encompasses the areas that made up the historic LeBreton Flats neighbourhood.

Cultural Heritage Value

The Ottawa River and most of its major drainage tributaries near present day LeBreton Flats were controlled by the various Algonquin bands that occupied the Ottawa River Valley. Major tributary rivers and their respective drainage basins were occupied and controlled by identified Algonquin bands. The area was used as an active trading point due to the confluence of three major rivers. Post-contact history of the area begins in 1610, when Étienne Brûlé travelled up the Ottawa River and made note of the waterfalls, which are located northwest of the study area. Champlain followed in 1613, and subsequently named them the Chaudière Falls.

Despite the early mention of the area in European colonial accounts, the Ottawa region was not settled by colonists of European decent until the early 1800s, when Philemon Wright arrived from Boston with a small group of settlers and established a community on the north side of the Ottawa River. He started trading timber in 1806. The region became known for the square timber trade. Thereafter, European settlers slowly began to enter the region. Industry developed throughout the 19th with lumber “barons” like J.R Booth, Henry Bronson, W.G. Perley, John Harris and E.B. Eddy. Booth was the largest lumber producer in the world, his company’s timber was used for both the *Mauretania* and *Lusitania Ocean* liners as well as the parliamentary library. In the year of his death, J.R Booth was estimated to have $44 million, equivalent to $600 million today and was vital to the development of Ottawa’s economy.

In 1900, a devastating fire started in Hull Quebec and jumped across the Ottawa River into LeBreton Flats burning nearly the entire neighbourhood to the ground. Following the Hull-Ottawa Fire, the neighbourhood was quickly rebuilt and remained a working-class neighbourhood for much of the 20th century until the land was expropriated by the federal government. The existing buildings were demolished, although plans for the construction of a federal government campus never materialized.

Due to the changes to the area over the course of the 20th century, the area contains several excavated and unexcavated archaeological sites. The sites cover the 19th and 20th century development of the site. The excavated sites have included the discovery of elements such as the Fleck Fountain.

The removal and demolition of the historic LeBreton Flats neighbourhood resulting from expropriation by the federal government in the late 20th century created a vast expanse of open and uninhabited space with minimal development. Despite the lack of infrastructure and significant development, the area has retained the name "LeBreton Flats" due to its historical associations. Some tangible components of the area create a physical and historical link to its surroundings. The LeBreton Flats Cultural Heritage Landscape has direct associations with the presence of the Ottawa Water Works complex that extends through the landscape. The Aqueduct is crossed by the Broad Street and Booth Street Bridges which are both physical representations of historic circulation patterns associated with the former LeBreton Flats community. The bridges act as a tangible reminder of the late 19th and early 20th century development within the area. Additionally, remnants of roadways that shaped the LeBreton Flats community are still discernible within the landscape including Fleet Street, portions of Booth Street beneath the LRT overpass, and portions of Broad Street across the Broad Street Bridge.

Heritage Attributes

The cultural heritage value of the LeBreton Flats Cultural Heritage Landscape is expressed through historical and associative as well as contextual heritage attributes.

Elements that contribute to the historical and associative value of the LeBreton Flats Cultural Heritage Landscape include:

- Its historical uses as an Indigenous and European trading post and meeting point along the Ottawa River
- Its associations with the establishment and growth of Ottawa's lumber industry and associations with influential figures such as J.R Booth, Henry Bronson, W.G. Perley, John Harris and E.B. Eddy.
- Its associations with the former working-class community of LeBreton Flats and the razing of the community by the federal government in the mid-20thcentury.
- The previously excavated and potential archaeological sites and resources, including artefacts such as the Fleck Fountain.

Elements that contribute to the contextual value of the LeBreton Flats Cultural Heritage Landscape include:

- The defining "LeBreton Flats" name for the geographic area.
- The presence and placement of the Ottawa Water Works complex, including the Open Aqueduct and the closed aqueduct.
- The old Booth Street and Broad Street bridges
- The historic land patterns as shown by the placement of Booth Street, Broad Street and Fleet Street.
- The evolved landscape comprised of tangible components and intangible historical associations with late 19th century industrial development, early 20th century community development and late 20th century federal government expansions.
- Its landmark location along the Ottawa River as a meeting point and place of change.

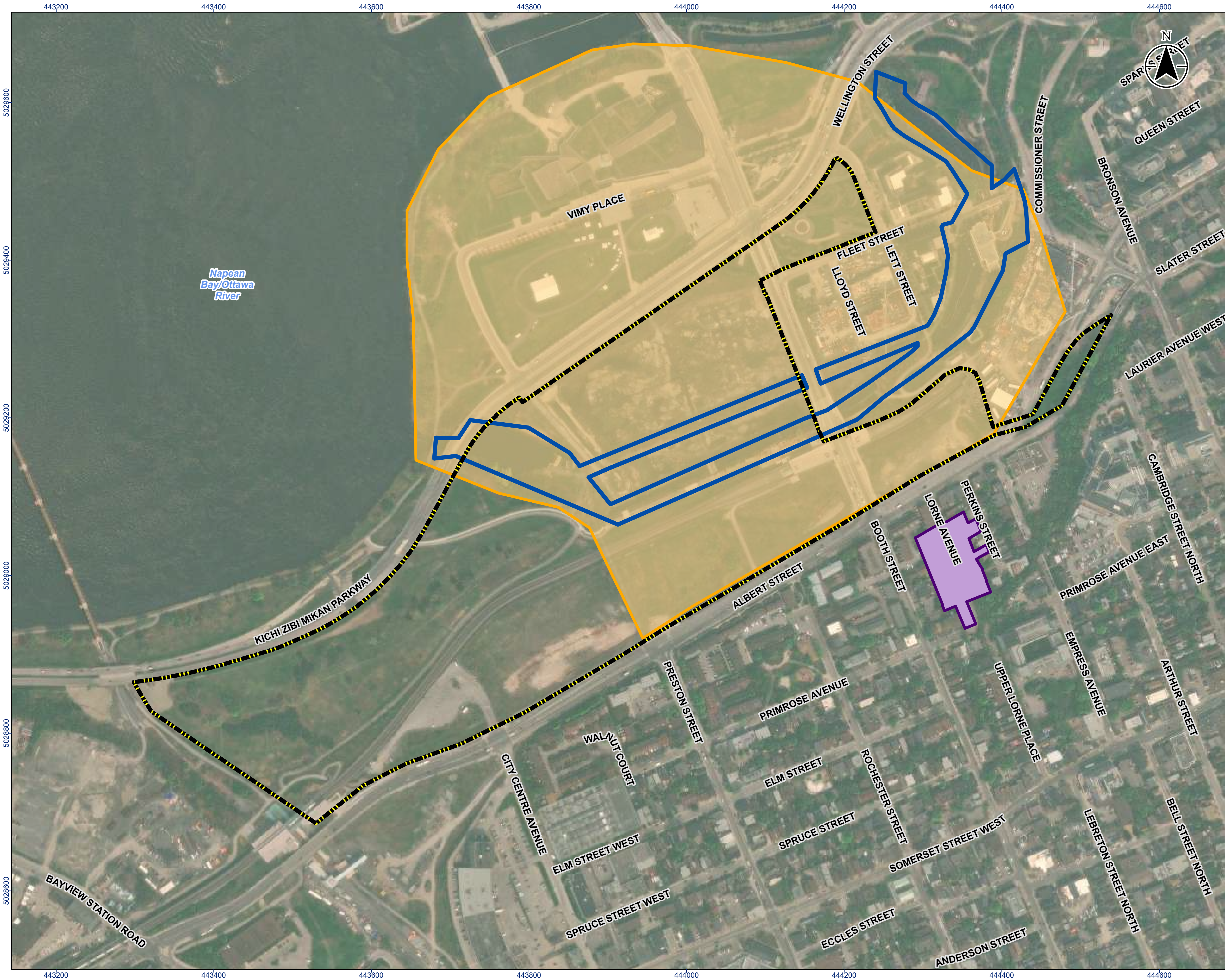
6.2 Ottawa Water Works Complex

The Ottawa Water Works Building and Aqueduct are designated under Part IV of the *Ontario Heritage Act* under by-law 2024-147. The main Ottawa Water Works Building is located outside the Study Area. The open aqueduct and the closed aqueduct pass through the Study Area. The designation by-law is included in Appendix A for reference.

6.3 Lorne Avenue Heritage Conservation District

The Lorne Avenue Heritage Conservation District (HCD) was designated under Part V of the Ontario Heritage Act in 2005 under by-law 2005-13. The Cultural Heritage Value of the Lorne Avenue HCD is identified below:

> *Lower Lorne Avenue (between Albert Street and Primrose Avenue) is a homogeneous, well-preserved street, typical of the type of housing built in Ottawa for the working-class from 1900 – 1907. The history of lower Lorne Avenue, located directly adjacent to LeBreton Flats, is associated with the development of LeBreton Flats as an industrial centre and as a residential area for the mill and railway workers who worked there. In the early 1850s, only a handful of labourers lived in the LeBreton Flats area, however, the sawn lumber industry expanded in the 1860s and new lands were subdivided, and houses were built for workers within walking distance of the mills and railway yards.*
>
> *The fire of Thursday, April 26, 1900, is a pivotal event in the history of Ottawa. It destroyed 400 acres of the west end of Ottawa, including all of the buildings on lower Lorne Avenue. Within a short period of time of the fire the residential and industrial buildings in the LeBreton Flats area were rebuilt. The rapid rebuilding that followed the fire resulted in the construction of the architecturally homogeneous houses on lower Lorne Avenue. These modest, brick, two-storey houses were an affordable replacement for the wood frame buildings that were destroyed by the fire.*
>
> *The streets adjacent to lower Lorne Avenue present streetscapes that have a different development history, as they are composed of buildings constructed before and after the fire of 1900. Lorne Avenue's cultural heritage significance is enhanced by the fact that its character is representative of the type of streetscape that was eliminated when the LeBreton Flats community was levelled in the early 1960s, leaving lower Lorne Avenue as a significant working-class streetscape to be conserved.*
>
> (City of Ottawa 2005)



Stantec

Legend

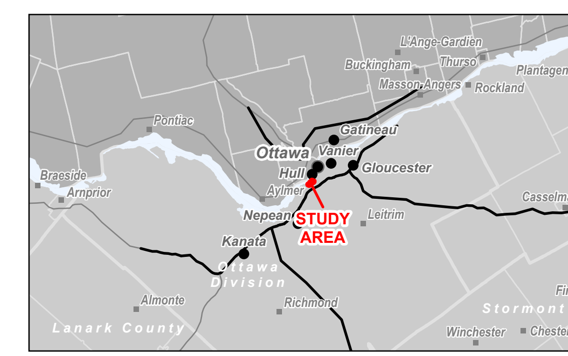
- HIA Study Area
- Ottawa Waterworks Building and Aqueduct
- Lorne Avenue Heritage Conservation District
- LeBreton Flats Cultural Heritage Landscape

0 100 200 m

1:5,000 (At original document size of 11x17)

Notes

1. Coordinate System:NAD 1983 UTM Zone 18N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
3. Imagery: Maxar; Imagery flown in 2022.



Project Location
Ottawa, ON

160401780 REVA
Prepared by tcoghlan on 2024-10-24
Technical Review by ABC on yyyy-mm-dd

Client/Project
National Capital Commission
LeBreton Flats Plan of Subdivision
Cultural Heritage Impact Statement

Figure No.
10

Title
Previously Identified and Potential Heritage Resources

\\ca0004-ppfss04\01609\active_Other_PCs_Active_609_GIS\160401780\03_data\gis_cad\gis\aprx\cultural_her\report_figures\160401780_CH_ImpactStatement.aprx\160401780_CHIS_Fig10_HeriResources Revised: 2024-10-24 By: tcoghlan

7 Impact Assessment

7.1 Description of the Proposed Undertaking

The proposed development includes the implementation of the LeBreton Flats Plan of Subdivision based on the 2021 Master Concept Plan for LeBreton Flats (Plate 5). Over a total plan area of 29-hectares, the NCC envisions a mixed-use neighbourhood at LeBreton Flats. The following development targets are anticipated to stem from the LeBreton Flats Plan of Subdivision:

- Total Plan Area: 29 hectares (71.1 acres)
- Parks and Open Space: 12.5 hectares (30.9 acres)
- Gross Floor Area: 520,000 square meters
- Residential Space: 293,261 square meters
- Office Space: 47,263 square meters
- Commercial Space: 19,756 square meters
- Hotel Space: 14,346 square meters
- Dwelling Units: 2,884
- New Residents: 5,461
- Jobs (post-construction): 3,750

This HIA is being prepared in advance of specific site plans and is to be used to support future cultural heritage approaches for the Study Area. The NCC has identified that the redevelopment of LeBreton Flats has been a significant point of discussion for the Ottawa community for many years. It embodies promise and opportunity to build the City; provide continued growth and tangible developments that will service a diverse array of needs. This proposed development is about implementing the Master Concept Plan by creating legal parcels for infrastructure and blocks for the NCC to enter into real estate transactions (NCC 2021).

Plate 5: LeBreton Flats Master Concept from 2021 Master Concept Plan (NCC 2021)

7.2 Assessment of Impacts

Table 2 provides an assessment of potential impacts to the identified CHVI and heritage attributes as described in Section 6. As described in Section 2.4 , Infosheet #5 was used to characterize impacts. Where impacts are anticipated, 'Y' is listed in the column. Where there may be potential for indirect impacts, 'P' is listed in the column. Where no impacts to CHVI are anticipated, 'N' is listed in the column. Some of the impact categories are not applicable given the scope of the proposed undertaking and the identified attributes of the resource. Where this is the case, 'N/A' is entered in the table. Further discussion is provided in Section 7.3.

Table 2: Potential Impacts to Identified CHVI

Resource	Potential for Direct Impact		Potential for Indirect Impact					Discussion
	Destruction	Alteration	Shadows	Isolation	Obstruction	Change in Land Use	Land Disturbances	
LeBreton Flats CHL	N	Y	N/A	N/A	P	Y	Y	The proposed development will result in a significant alteration to the LeBreton Flats Cultural Heritage Landscape. The intangible attributes, such as the historical and associative associations, will not be impacted. However, there will be alterations to tangible heritage attributes such as the Booth Street and Broad Street Bridges, the placement of the historic Broad Street, the remaining archaeological sites. Additionally, there will be indirect impacts caused by obstructions, changes in land uses and land disturbances due to the proposed residential developments within the CHL. **Accordingly, mitigation measures must be prepared.**

Resource	Potential for Direct Impact		Potential for Indirect Impact					Discussion
	Destruction	Alteration	Shadows	Isolation	Obstruction	Change in Land Use	Land Disturbances	
Ottawa Water Works Complex	N	Y	P	N	P	Y	Y	The proposed development will result in potential alterations to the Ottawa Water Works Complex, namely to the Aqueduct. While the Aqueduct will not be relocated, the redevelopment of LeBreton Flats will surround the Aqueduct. The proposed development will also have indirect impacts caused by changes in land uses and land disturbances, with the potential for indirect impacts caused by shadows and obstructions. **Accordingly, mitigation measures must be prepared.**
Lorne Avenue HCD	N	N	N	N	N	N	P	The proposed undertaking is not anticipated to have direct impacts on the Lorne Avenue HCD. Shadows from the proposed undertaking will not alter the appearance of the properties. No isolation impacts are anticipated as the buildings are part of the surrounding residential area. The properties within the HCD will have no change in land use with the proposed undertaking. There is the potential for indirect land disturbances related to adjacent project activities and vibration activities as the buildings are within 50 metres of the proposed undertaking. **Accordingly, mitigation measures must be prepared.**

7.3 Discussion of Impacts

Direct impacts were identified to the LeBreton Flats Cultural Heritage Landscape due to planned alterations within the CHL that have the potential to alter identified heritage attributes. Potential direct impacts were identified for the Ottawa Water Works Complex's Aqueduct due to planned alterations near the Aqueduct. Indirect impacts were identified for both the LeBreton Flats CHL and for the Ottawa Water Works Complex's Aqueduct due to shadows, obstructions, changes in land use and land disturbances. Therefore, mitigation measures are required to conserve the heritage attributes of the property.

Indirect impacts were identified for the Lorne Avenue Heritage Conservation District due to Land Disturbances. As outlined in Section 2.2.2, while impacts of vibration on heritage buildings are not well understood, vibrations may be perceptible in buildings with a setback of less than 40 metres. Given the direct adjacency of proposed development activities, mitigation measures are required to conserve the identified heritage resources due to these indirect impacts. In all other cases, impacts are not anticipated, including shadows, obstruction of views, isolation of a heritage resource, and changes in land use. The shadows from the proposed undertaking will not alter the appearance of the identified heritage attributes of the Lorne Avenue Heritage Conservation District.

8 Alternatives and Mitigation Measures

As identified in Section 7, the proposed undertaking has the potential to result in direct and indirect impacts to identified CHVI of the LeBreton Flats Cultural Heritage Landscape, the Ottawa Water Works Complex, and indirect impacts to the Lorne Avenue HCD. Intangible attributes related to the historical and associative values of the site will be altered, but mitigative options have been identified to enhance the intangible values of the site. The mitigation options and alternatives presented for the proposed development include:

- InfoSheet #5 Mitigation Options (see Section 2.5)
- Retention *in situ*
- Interpretation and Commemoration

Consideration for each option is given for both the appropriateness of the mitigation or alternative in the context of the CHVI identified and its associated feasibility. Also considered is an understanding of the surrounding context within which the Study Area is located. As mitigation measures were being prepared, the NCC's guide *Working with Cultural Landscapes* was reviewed.

8.1 InfoSheet #5 Mitigation Options

As shown in Table 3 below, the Mitigation Options presented in Section 2.5 have been assessed based on the development proposal as described in Section 7.1. As per InfoSheet #5, the mitigation measures are not meant to be exhaustive, and alternative mitigation measures or approaches are discussed in the following sections.

Table 3: InfoSheet #5 Mitigation Options

Mitigation Measure	Approach
Alternative development approaches	The proposed development is being developed to meet specific targets as identified in Section 7.1. The proposed development will limit impacts to tangible components associated with the heritage value of the site and will incorporate interpretation and commemoration approaches which are further defined in Section 8.4.
Isolating development and site alteration from significant built and natural features and vistas	The proposed development includes the future construction of buildings adjacent to the Ottawa Water Works Aqueducts. Due to the requirements identified in Section 7.1, isolating development from the Aqueducts is not feasible for the property. The possibility of alternative development approaches and isolating development from the heritage resource was considered with the project team but was considered not to be feasible due numerous site requirements. Given the historical associations of the site, the redevelopment of the area directly abutting the open aqueduct ties back to the residential community that was previously constructed around the aqueduct.

Mitigation Measure	Approach
Design guidelines that harmonize mass, setback, setting, and materials	As the CHVI of the impacted heritage resources is not mainly associated with the built form, design guidelines are not an applicable mitigation measure. The LeBreton Flats CHL consists of undeveloped lands with a rich history that should be commemorated throughout the development. Interpretation and commemoration approaches are further defined in Section 8.4. The Ottawa Water Works Complex Aqueduct is located at grade. The proposed developments are set back from the edges of the aqueduct and are designed to frame and enhance the presence of the Aqueducts. The Lorne Avenue HCD is located adjacent to the development areas. The LeBreton Flats area is not subject to design guidelines of the HCD.
Limiting height and density	As noted above, the CHVI of the impacted heritage resources consists mostly of intangible heritage values with limited human-scale built heritage attributes. Therefore, limiting height and density is not an applicable mitigation measure. The redevelopment of LeBreton Flats has been a significant point of discussion for the Ottawa community for many years.
Allowing only compatible infill	As noted above, the CHVI of the impacted heritage resources consists mostly of intangible heritage values with limited human-scale built heritage attributes The development area consists of open land with adjacent buildings located far from the development areas. Thus, the development of LeBreton flats would not be considered infill.
Reversible alterations	Given the proposed development of the vacant lands, reversible alterations are not applicable within the scope of the proposed undertaking.
Buffer zones, site plan control, and other planning mechanisms	The potential for land disturbance to previously identified built heritage resources have has been identified. Additional information as it relates to buffer zones, site plan controls and other planning mechanisms is included in Section 8.5.

8.2 Retention In Situ

Generally, retention in situ is the preferred option when addressing a resource where CHVI has been identified, even if limited. The benefits of retaining a resource must be balanced with site-specific considerations. Not only must the CHVI be considered, so too must the structural condition of the heritage resource, the site development plan, and the context within which the structure, or structures, would be retained. Recognizing the need for balance is an important step in consideration of the preferred mitigation options.

In the case of the proposed development, retention *in situ* and continued use of the Ottawa Water Works Complex is feasible and recommended from a heritage perspective. Retention *in situ* conserves its CHVI and still accommodates the functional requirements of the proposed development. Retention *in situ* of tangible heritage attributes associated with the LeBreton Flats Cultural Heritage Landscape including the Booth Street Bridge and the Broad Street Bridge is also feasible and recommended. Where changes are proposed to tangible heritage attributes that have been left *in situ* during the preliminary development phases, an additional Heritage Impact Assessment should be completed to assess impacts and identify alternative approaches.

Other tangible associative and contextual heritage attributes associated with the LeBreton Flats Cultural Heritage Landscape including the historic placement of Broad Street and the remaining archaeological sites may not be suited to *in situ* retention given the proposed development of the site. Therefore, further options are explored below.

8.3 Excavation

Where *in situ* retention is not feasible or when significant alterations are proposed, specifically as it relates to the remaining archaeological sites, additional mitigation measures should be implemented. Future excavations should be led by a licensed archaeologist and completed based on requirements of the proposed development plan. Where archeological resources are identified, they should be recorded and stored for potential future interpretation.

8.4 Interpretation and Commemoration Plan

An Interpretation and Commemoration Plan (ICP) is often prepared as part of a development to conserve and commemorate the intangible heritage value and intangible heritage attributes of a heritage resource. The rationale for completing an ICP in advance of detailed design and construction of a heritage resource is to contemplate appropriate ways a resource can be acknowledged for its important role in the history of a place before the site is altered. An ICP identifies options to recognize the CHVI associated with the site and provide strategies to guide the integration of retained features and/or excavated artefacts elements into the design of the new development. The ICP should outline strategies for the implementation of commemorative displays which can interpret the history of LeBreton Flats throughout the public areas of the development. The goal is to retain elements that can be used to communicate and interpret the history of a place to the public. Therefore, a plan to commemorate both the tangible and intangible heritage value of the CHL must balance historic uses and proposed development proposals to find opportunities for storytelling so that the public understands the history of LeBreton Flats and how it fits into the history of Ottawa, more broadly.

There are a wide range of commemoration programs that may be installed on the property and/or within the future development to conserve the identified heritage value and history associated with the site. The proposed interpretation approaches may focus on the recognized cultural heritage value of the site, including the historical/associative and contextual value previously identified. To effectively convey the cultural heritage value of the property, the ICP should identify components from the site and historic material such as photography and mapping to assist in commemorative features. To develop this list, it is important to first understand the themes that the property represents. Additional commemoration activities may include public involvement to guide activities and build upon the established histories of a place. This may range from the creation of an oral history related to a specific property or group of properties to participation in the preparation of commemorative signage. It is recommended that the ICP be developed in consultation with the City of Ottawa, Canadian Heritage, Indigenous Nations and communities, and other community stakeholders.

The interpretative and commemorative materials for the area should be installed in publicly accessible locations on the property. The commemoration should be AODA compliant and conform with the Crime Prevention Through Environmental Design (CPTED) principles and be designed and sited to reduce potential for vandalism and be located within area of high surveillance.

8.5 Buffer Zones, Site Plan Control, and Other Planning Mechanisms

As the development is planned directly adjacent the Ottawa Water Works Complex Aqueducts and near the Lorne Avenue HCD, site plan controls will serve to protect adjacent properties from construction activities. This includes stabilization measures and protective barriers for the adjacent buildings and landscape features to indicate where construction activities should be limited. An effective approach typically includes identification of heritage structures on all construction plans to provide for sensitive treatment throughout construction activities.

As identified in Section 0, there is the potential for indirect impacts to the adjacent properties resulting from construction-related ground vibration. To mitigate this risk, a strategy to carry out a pre-condition survey, vibration monitoring, and post-condition survey is typically employed. These plans are most often developed by a licensed Geotechnical Engineer with heritage experience.

The pre-construction condition survey typically includes screening the adjacent designated properties to establish the existing conditions and vulnerability of the structure. Following the pre-construction condition survey, acceptable vibration limits for the structure are established prior to construction based on existing conditions, soil conditions, and type of construction vibration. Should the need for monitoring be identified, monitoring the ground-borne vibration levels in peak particle velocity (PPV) while construction activities take place provide for the safeguarding of the structure in line with acceptable limits. The vibration monitoring program may include the installation of vibration monitoring equipment in the building. Where acceptable levels are exceeded, construction activities may need to be paused as directed by the Geotechnical Engineer to determine a less invasive method for construction. This could range from an adjustment in equipment to avoidance of a certain portion of the property given ground conditions. Only after vibration levels have decreased does construction resume. A post-construction condition survey would assist in documenting any damage associated with construction activities.

9 Recommendations

Following the evaluation against *O.Reg. 9/06* which identified the LeBreton Flats Cultural Heritage Landscape as having CHVI, an impact assessment was carried out to identify the potential impacts of the proposed development. The impact assessment determined that the proposed development would result in direct and indirect impacts to the LeBreton Flats Cultural Heritage Landscape and to potential indirect impacts to the Ottawa Water Works Complex Aqueduct and to the Lorne Avenue Heritage Conservation District. To mitigate these impacts, several development alternatives were considered as mitigation measures, including retention of the built components *in situ* and the implementation of an intensive Interpretation and Commemoration Plan. The mitigation measures below have been recommended.

For the LeBreton Flats Cultural Heritage Landscape and Ottawa Water Works Complex:

- Retention *in situ* of tangible heritage attributes associated with the LeBreton Flats Cultural Heritage Landscape including the Booth Street Bridge and the Broad Street Bridge. Retention *in situ* and continued use of the Ottawa Water Works Complex's Open Aqueduct and Closed Aqueduct is feasible and recommended. The placement of historic street layouts and naming conventions such as Broad Street, Fleet Street and Booth Street, should be considered in create a tangible link between the historic LeBreton Flats community and the proposed redevelopment of the site.
    - Where changes are proposed to tangible heritage attributes that have been left *in situ* during the preliminary development phases, an additional Heritage Impact Assessment should be completed to assess impacts and identify alternative approaches. Potential design changes where a subsequent Heritage Impact Assessment will be required include, but are not limited to, proposals that consider daylighting/opening the Closed Aqueduct, alterations to the alignment of the Open and Closed Aqueducts, and alterations to the Booth Street and Broad Street Bridges.
- Future excavations should be led by a licensed archaeologist and completed based on requirements of the proposed development plan. Where archeological resources are identified, they should be recorded and stored for potential future interpretation.
- Preparation of an Interpretation and Commemoration Plan to commemorate the intangible cultural heritage value of LeBreton Flats. The Interpretation and Commemoration Plan should include site-specific history and specific commemoration requirements (i.e., interpretative signage, integration, and display of excavated artefacts). A focus of the Interpretation and Commemorative Plan should be telling the story of the evolution of the site, the people and communities who influenced the changes, and its ties to the surrounding areas.

For the Lorne Avenue Heritage Conservation District:

- To limit potential negative indirect impacts on individual properties adjacent to the proposed development, the adjacent heritage conservation district should be isolated from construction-related activities. These controls should be indicated on all construction mapping, flagged in the field onsite, and communicated to construction team leads. Site plan controls should also include stabilization measures and protective barriers for the adjacent designated properties to indicate where construction activities should be limited, this should include at minimum the installation of temporary fencing around heritage features. In addition, vibration studies for the adjacent listed and designated properties should be completed under the direction of a qualified geotechnical engineer or vibration specialist. A recommended approach to vibration assessment is as follows:
    - Pre-condition survey should be prepared by a qualified engineer to determine the maximum acceptable vibration levels, or PPV levels and the appropriate buffer distance between construction activities and the adjacent heritage resources.
    - Vibration monitoring should be carried out and consist of monitoring the ground-borne vibration levels, in PPV while construction activities take place.
    - Post-construction condition survey should be carried out as determined by the Geotechnical Engineer. Post-construction condition survey shall be conducted after completion of construction for comparison purposes.

General Recommendations:

To provide for the retention of historic information, copies of this report should be deposited with a local repository of historic material. Therefore, it is recommended that this report be deposited by the National Capital Commission at the following locations:

Library and Archives Canada
395 Wellington Street
Ottawa, ON K1A 0N4

Ottawa Public Library
120 Metcalfe Street
Ottawa, ON K1P 5M2

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Appendix A Ottawa Water Works Complex Designation By-Law

CERTIFIED A TRUE COPY
Caitlin Salter-MacDonald Deputy City Clerk
Date APR 0 4 2024

BY-LAW NO. 2024 - 147

A by-law of the City of Ottawa to designate Ottawa Water Works Complex, to be of cultural heritage value or interest.

WHEREAS the *Ontario Heritage Act*, R.S.O. 1990, c. O.18, as amended, authorizes the Council of a municipality to enact by-laws to designate real property, including all buildings and structures thereon, to be of cultural heritage value or interest;

AND WHEREAS the Council of the City of Ottawa has caused notice of intention to designate to be served upon the owners of the lands and premises known municipally as Ottawa Water Works Complex (more particularly described in Schedule "A" hereto), and upon the Ontario Heritage Trust, the said notice being published online on Ottawa.ca on April 10, 2024, as permitted by by-law 2002-522 as amended;

AND WHEREAS no notice of objection to the said proposed designation was served upon the Clerk of the municipality;

AND WHEREAS the statement of cultural heritage value or interest and description of heritage attributes reasons for designation are set out as Schedule "B" hereto;

THEREFORE the Council of the City of Ottawa, enacts as follows:

1. The real property known municipally as Ottawa Water Works Complex, and more particularly described in Schedule "A" attached hereto, is hereby designated as being of cultural heritage value or interest.

2. The Statement of Cultural Heritage Value or Interest and Description of Heritage Attributes are set out as Schedule "B" hereto.

3. The City Solicitor is hereby authorized to cause a copy of this By-law to be registered against the property described in Schedule "A" hereto in the proper Land Registry office.

4. The City Clerk is hereby authorized to cause a copy of this By-law to be served upon the owners of the property described in Schedule "A", and upon the Ontario Heritage Trust, and to cause notice of this By-law to be published online on Ottawa.ca as permitted by by-law 2002-522 as amended.

5. The schedules attached hereto and marked Schedule "A" and Schedule "B" form part of this By-law, and all notations, references and other information contained therein shall be as much a part of this By-law as if all the matters and information set forth by the said Schedules were all fully described herein.

ENACTED AND PASSED this 3rd day of April 2024.

DEPUTY CITY CLERK

MAYOR

SCHEDULE "A"

PIN

04280 - 0081

DESC

PART OF LOT 40 CONCESSION AOF, PART 38 PLAN 4R13921

PIN

04097 - 0271

DESC

PART OF BROAD STREET CLOSED BY LT1243127 ON PLAN 2, PART OF LOT 39, CONCESSION A, OTTAWA FRONT (NEPEAN), LOTS 1 TO 22 IN BLOCK F, PART OF SHERWOOD STREET CLOSED BY LT1243127, LOTS 1, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 21, PART OF LOTS 3, 5, 7, 9, 11, 13, 15, 17, 19, 22 IN BLOCK E, PLAN 2 BEING PTS 3, 4, 5 & 6 ON PL 4R-13921 AND PART 42, PL 4R- 13970, S/E PARTS 1 & 5 ON PL 4R-18325 AND PARTS 1 & 10, PLAN 4R-19846; LOTS 2 TO 12 IN BLOCK G ON PLAN 2 BEING PART 41 ON PLAN 4R-13970; LOTS 2, 4, 6, 8, 10, 11, PART OF LOTS 3, 5, 7, 9, 12 IN BLOCK H ON PLAN 2 BEING PART 43 ON PLAN 4R-13970, SAVE & EXCEPT PART 4 ON 4R27105; PART OF OTTAWA STREET CLOSED BY LT1243127 ON PLAN 2 BEING PART 34 ON PLAN 4R-13970, SAVE & EXCEPT PART 6 ON 4R27105; PART OF LOTS 1 TO 4 IN BLOCK S, LOTS 1 AND 4, PART OF LTS 2 AND 3 IN BLOCK T, PART OF SHERWOOD STREET CLOSED BY CR280019 ON PLAN 2 BEING PARTS 31 AND 32 ON PLAN 4R-13970 SAVE AND EXCEPT PART 2 ON PLAN 4R-14517 AND PART 8 ON 4R27105; PART OF FLEET STREET, FORMERLY QUEEN STREET, CLOSED BY LT1243127 ON PLAN 2 BEING PART 8 ON PLAN 4R-13921 SAVE AND EXCEPT PARTS 1, 2 AND 4 ON PLAN 4R-18325; PART OF THE BED OF THE OTTAWA RIVERLYING IN FRONT OF LOT 40, CONCESSION A, NEPEAN (O.F.) BEING PART 3 ON PLAN CAR-191; PART OF LOT 39, CONCESSION A, NEPEAN (O.F.) BEING A STRIP OF LAND 33 FEET IN WIDTH ADJACENT TO LOT 40, CONCESSION A, NEPEAN (O.F.) RUNNING NORTH FROM THE NORTHERLY LIMIT OF OREGON STREET TO THE BRONSON CHANNEL AS IN CR503940; PT LT 39, CON. A, NEPEAN (O.F.) AS IN CR238358; PART OF LOT 39, CONCESSION A, NEPEAN (O.F.) PART OF THE BED OF THE OTTAWA RIVER LYING IN FRONT OF LOT 39, CONCESSION A, NEPEAN (O.F.), AS IN CR614223 BEING PART 2 ON PLAN CAR-191; PART OF LOT 39, CONCESSION A, NEPEAN (O.F.) AS IN CR441931 BEING ALL THAT PART LYING NORTH OF PARTS 1, 2 AND 5 ON PLAN 5R-13914 BEING PARTS 28 AND 29 ON PLAN 5R-13914; PART OF DUKE STREET CLOSED BY LT1243120 ON PLAN 2; PARTOF LOT 40, CONCESSION A, NEPEAN (O.F.) AS IN CR503940 SAVE AND EXCEPT PARTS 1 AND 2 ON PLAN 4R-14032; PART OF LOT 39, CONCESSION A, NEPEAN (O.F.)

BEING PARTS 1 TO 12, 14 TO 19 ON PLAN 4R-13970, EXCEPT PARTS 2 ON PLAN 4R21198 AND PART 1 ON PLAN 4R21967

PIN

04112 - 0162

DESC

BLOCK 5, PLAN 4M1342

PIN

04112 - 0110

DESC

PART OF LOT 40 CONCESSION AOF, AND PART OF LOTS 1, 2 AND 3, BLK P, PLAN 2, BEING PARTS 17 AND 18 PLAN 5R13914 AND PART OF 15 PLAN 5R13914 LYING EAST OF PARTS 79, 81, 82 AND 83 PLAN 4R13970 EXCEPT PARTS 78 AND 80 PLAN 4R13970

PIN

04097 - 0158

DESC

PART OF LOT 39 CONCESSION AOF, BEING PART 5 PLAN 5R13914 EXCEPT PARTS 1 TO 9, 17, 18 AND 19 PLAN 4R13970

PIN

04112 - 0104

DESC

PART OF LOT 40 CONCESSION AOF (FORMERLY TRAVELLED AS LLOYD STREET) AND PART OF LLOYD STREET (CLOSED BY BYLAW LT1243121) PLAN 2, BEING PART 3 PLAN 4R14031

PIN

04112 - 0106

DESC

PART OF LOT 40 CONCESSION AOF (FORMERLY TRAVELLED AS LETT STREET) AND PART OF LETT STREET (CLOSED BY BYLAW LT1243121) PLAN 2, BEING PARTS 1,2, 5, 6 AND 7 PLAN 4R14030 ; OTTAWA/NEPEAN. SUBJECT TO AN EASEMENT IN FAVOUR OF THE NATIONAL CAPITAL COMMISSION OVER PARTS 2 AND 5 PLAN 4R14030 AS IN CR718993

PIN

04112 - 0107

DESC

PART OF LOT 40 CONCESSION AOF (FORMERLY TRAVELLED AS LLOYD STREET) & PART OF LLOYD STREET, CLOSED BY BYLAW LT1243121, PLAN 2, BEING PARTS 1, 2, 4 AND 5 PLAN 4R14031

PIN

04112 - 0108

DESC

PART OF LANE AT REAR OF BLOCK Q (CLOSED BY BYLAW LT1243121) PLAN 2, BEING PART 86 PLAN 4R13970

PIN

04112 - 0109

DESC

PART OF LOT 40 CONCESSION AOF, PART OF L. PERKINS LOT,BLK K, PLAN 2, PART OF LOTS 2, 3, 5 AND 7, BLK K, PLAN 2, LOTS 1 AND 2, BLK O, PLAN 2, PART OF LOTS 3, 4, 5, 6, 7, 8 AND 9, BLK O, PLAN 2, BEING PARTS 20 AND 21 PLAN 5R13914 EXCEPT PARTS 58, 59, 60, 63, 64 AND 66 PLAN 4R13970

PIN

04097 - 0150

DESC

PART OF LOT 39 CONCESSION AOF, PART OF BROAD STREET (CLOSED BY BYLAW LT1243121) PLAN 2, BEING PARTS 1 AND 4 PLAN 4R14029

PIN

04097 - 0151

DESC

PART OF LOT 39 CONCESSION AOF, PART OF BROAD STREET (CLOSED BY BYLAW LT1243121) PLAN 2, BEING PART 2 PLAN 4R14029

PIN

04097 - 0160

DESC

PART OF LOT 40 CONCESSION AOF, PART OF SHERWOOD STREET (CLOSED BY BYLAW CR281019) PLAN 2, PART OF LANE AT REAR BLK S (CLOSED BY BYLAW LT1243121) PLAN 2, PART OF LOTS 2 AND 3, BLK S, PLAN 2, PART OF LOTS 2 AND 3, BLK T, PLAN 2, BEING PARTS 2, 3 AND 5 PLAN 4R14306

PIN

04097 - 0152

DESC

PART OF LOT 39 CONCESSION AOF, PART OF BROAD STREET (CLOSED BY BYLAW LT1243121) PLAN 2, BEING PART 22 PLAN 4R13970

PIN

04097 - 0155

DESC

PART OF LOT 3, BLK S, PLAN 2, PART OF LOTS 2 AND 3, BLK T, PLAN 2, PART OF SHERWOOD STREET (CLOSED BY BYLAW CR281019) PLAN 2, BEING PART 27 PLAN 4R13970

PIN

04097 - 0100

DESC

PT LT 39, CON AOF ; PT BED OF_OTTAWA RIVER_LYING , IN FRONT OF LOT 39 CON AOF ; BEING PTS 1, 2, 3, & 4 5R13914

PIN

04097 - 0157

DESC

PART OF LOT 3, BLK T, PLAN 2, BEING PART 5 PLAN 4R14029

PIN

04097 - 0242

DESC

PART OF LOT 39 CONCESSION A OTTAWA FRONT, BEING PARTS 7, 10 5R13914 AND EXCEPT PARTS 14, 15 AND 16 PLAN 4R13970, SAVE & EXCEPT PART 45, 5R13914; PART PRESTON STREET CLOSED BY OC1899021 BEING PARTS 1 & 2, 4R28400

PIN

04112 - 0111

DESC

PART OF LOT 40 CONCESSION AOF, PART OF BOOTH STREET PLAN 2, PART OF WATER WORKS RESERVE PLAN 9481, PART OF LOTS 2 AND 3, BLK R, PLAN 2, BEING PARTS 14, 40, 41 AND PART OF PART 15 PLAN 5R13914, LYING WEST OF PARTS 81, 82 AND 83 PLAN 4R13970 EXCEPT PARTS 84, 85 AND 86 PLAN 4R 13970

PIN

04112 - 0164

DESC

BLOCK 7, PLAN 4M1342

PIN

04097 - 0268

DESC

PART OF LOT 40 CONCESSION A (OTTAWA FRONT), PART OF LOT 2 BLOCK R PLAN 2, BEING PART 26 ON 4R32005 SAVE & EXCEPT PARTS 2 & 6 ON 4R32151

PIN

04097 - 0153

DESC

PART OF LOT 39 CONCESSION AOF, PART OF BROAD STREET (CLOSED BY BYLAW LT1243121) PLAN 2, BEING PART 24 PLAN 4R13970

PIN

04097 - 0241

DESC

PART OF LOT 39 CONCESSION A OTTAWA FRONT, BEING PART 45 PLAN 5R13914; S/T NS25410

PIN

04097 - 0269

DESC

PART OF LOT 40 CONCESSION A (OTTAWA FRONT), PART OF SHERWOOD STREET (CLOSED BY BYLAW CR280019) PLAN 2, PART OF LOTS 2 AND 3, BLOCK T, PLAN 2, PART OF LANE AT REAR OF BLOCK S (CLOSED BY BYLAW LT1243121) PLAN 2, PART OF LANE AT REAR OF BLOCK T (CLOSED BY BYLAW LT1243121) PLAN 2, DESIGNATED AS PARTS 4, 6 AND 7, 4R14306 AND PARTS 2 AND 6, 4R32151, SAVE & EXCEPT PART 26 ON 4R32005

PIN

04280 - 0075

DESC

PART OF FLEET STREET (FORMERLY QUEEN ST) PLAN 2, LYING EAST OF PART 12PLAN 4R13921 ; PART OF LOT 40 CONCESSION AOF AS, AS IN CR241682

PIN

04097 - 0144

DESC

PART OF OTTAWA ST. (CLOSED BY BYLAW LT1243127) PLAN 2, PART 33 PLAN 4R13970

PIN

04112 - 0092

DESC

PART OF OTTAWA ST. (CLOSED BY BYLAW LT1243127) PLAN 2, PART 50 PLAN 4R13970

PIN

04112 - 0166

DESC

BLOCK 9, PLAN 4M1342

PIN

04097 - 0270

DESC

PART OF LOTS 3, 5, 7, 9 & 12 BLOCK H PLAN 2, PART OF OTTAWA STREET (CLOSED BY LT1343127) PLAN 2 AND PART LOTS 1 & 2 BLOCK S PLAN 2, BEING PARTS 4, 6 & 8 ON 4R27105

PIN

04112 - 0152

DESC

PART OF LOTS 2, 4, 6, 8 AND 10, BLOCK I; PART OF LOT 2, BLOCK Q; PART OF OTTAWA STREET (CLOSED BY LT1243127) ALL ON PLAN 2 BEING PARTS 1, 2 AND 3 ON PLAN 4R-20516

PIN

04112 - 0165

DESC

BLOCK 8, PLAN 4M1342

PIN

04280 - 0176

DESC

PART LOT 40 CONCESSION A OTTAWA FRONT NEPEAN PARTS 34 & 35 PLAN 4R13921

PIN

04280 - 0078

DESC

PART OF LOT 40 CONCESSION AOF, PARTS 39 AND 40 PLAN 4R13921

PIN

04280 - 0076

DESC

PART OF POOLEY STREET (FORMERLY BRITTANIA TERRACE, CLOSED BY BYLAW CR610336) PLAN 2, PARTS 30 AND 33 PLAN 4R13921

SCHEDULE "B"

DESCRIPTION OF PROPERTY

The Ottawa Water Works complex is a cultural heritage landscape comprised of the Water Works Building at 10 Fleet Street, the covered aqueduct, the open aqueduct to the west including the headworks, the channeled tailrace to the north of the pumping station, and five stone bridges that cross the aqueduct. The bridges include four single-span bridges; the Canada Central Railway, Broad Street, Booth Street, and the combined Lloyd/Lett/Grand Trunk Railway bridge and the triple span Pooley's Bridge, located north of the pumping station. The complex was constructed in 1872-74, with additions to the Water Works building in 1888 and 1899. The Ottawa Water Works is located on LeBreton Flats, west of downtown Ottawa.

STATEMENT OF CULTURAL HERITAGE VALUE OR INTEREST

The Ottawa Water Works has cultural heritage value for its role in the early development of municipal water works systems in Canada, its association with local engineer Thomas Coltrin Keefer, its design and physical value and its contextual value as a cultural heritage landscape and the only remaining historic structures on LeBreton Flats.

Associative or Historic Value

The Ottawa Water Works has historic value as an early example of a municipal water works systems built in the late 19th century. The Carleton Country fire of 1870 and the Great Chicago fire of 1871, combined with a desire to provide clean drinking water, led Ottawa City Council to engage Thomas Coltrin Keefer to oversee the design and construction of the Water Works building and aqueduct in 1872. In 1870, there were only seven municipal water works in Canada. During the following decade, 23 systems were constructed, including the Ottawa system and by 1900 there were 235 municipal systems. The Ottawa Water Works has cultural heritage value for its continued use in the provision of clean drinking water to the city of Ottawa.

The Ottawa Water Works has historic value for its association with Thomas Coltrin Keefer, a prominent Ottawan and one of the leading civil engineers in Canada in the mid-19th century. Early in his career Keefer worked on the Welland and Erie Canals and in 1845 he was appointed engineer in charge of timber slides and river works for Bytown. Keefer settled in Ottawa but continued to be involved in large scale engineering projects elsewhere including the Montreal Water Works (1853) and Hamilton Water Works (1859). Keefer first prepared plans for the Ottawa Water Works in 1859. Keefer is commemorated for his engineering works as a National Historic Person and the plaque is located at the Water Works building. The Water Works building also has cultural heritage value for its association with prominent Ottawa architect Edgar L. Horwood. Horwood designed the 1899 expansion to the pumping station. Horwood practiced privately in the late 19th and early 20th centuries before being appointed Chief

Dominion Architect in 1915, a post he held for two years, after which he returned to private practice for the remainder of his career. He designed several well-known buildings in Ottawa including the Britannia Yacht Club and several public schools including First Avenue and Mutchmor.

The earliest structure in the Water Works complex is Pooley's Bridge which was constructed by Alexander Sparks in 1872 to the specifications of City of Ottawa Engineer George Hugo Perry. Pooley's Bridge has associative value as the oldest remaining structure from Ottawa's municipal development program of the 1870s to establish permanent infrastructure. Other projects from this era include the first City Hall (burned 1931), the first civic park at Major's Hill, and the pumping station. Pooley's Bridge has historic value for its age and continued use as a bridge; it is the oldest bridge in Ottawa and it is considered the second oldest stone arch bridge in Ontario.

Design Value

The Water Works building has design value as a good example of late 19th century industrial building. It is a two-storey flat roofed building constructed in phases beginning in 1873-74. The original Keefer building was a one-storey structure with a mansard roof. In 1888, additional pumps were installed in a ground floor addition designed by local architect E.L. Horwood. In 1899, the mansard roof was removed and a second storey, flat-roofed addition was added. The building is well-detailed, and includes rusticated stone arches and voussoirs, pairs of segmentally arched windows on the ground floor and round arched windows on the second storey.

Pooley's Bridge has design value as a large, triple arched, closed-spandrel stone bridge. The bridge over the channeled tailrace is a good and rare example of a large stone bridge in Ottawa and is a representative example of 19th century bridge design.

The open aqueduct has design value for its industrial and intentionally rustic character. Hewn from the bedrock, it is a unique industrial structure in Ottawa. It is characterized by its uneven stone edges, gradually sloping sides with soft landscaping and limestone pitching and the four low, single span stone bridges that cross it. The Ottawa Water Works has design value for its innovative engineering; the Water Works took advantage of a natural depression on the flats for the open aqueduct and rather than using the steam-driven pumps that were typical of the period, the pumps were hydraulic. Water was drawn in from the headworks above the Chaudière Falls and fed through the open aqueduct to waterwheels connected to two large pumps. A clear water pipe in the aqueduct provided clean drinking water to the municipal system. The pumps have been replaced over time, along with the headworks facility, while the open aqueduct remains.

Contextual Value

Contextually, the Ottawa Water Works complex has heritage value as a cultural landscape and as the last remaining set of 19th century structures on LeBreton Flats. LeBreton Flats was a vibrant, working-class community linked to the logging industry on

the Ottawa River nearby and was home to foundries and other industry. The neighbourhood was completely cleared in the 1960s as part of the NCC's Gréber Plan and the larger trend of urban renewal in the mid-20th century.

The landscape of the Water Works complex also contributes to an understanding of the former link to Ottawa's 19th century railway system, as evidenced in the arrangement of the bridges over the aqueduct which reflect the former railway and road patterns. The underground, covered aqueduct was constructed in 1912 and lies below the former Ottawa Street, which ran east-west across LeBreton Flats and its alignment is a reminder of the former road pattern.

The structures that comprise the Ottawa Water Works are linked by the open aqueduct channel, the covered aqueduct, the connection to the Ottawa River and common design elements of the bridges, creating a picturesque cultural landscape. As the only remaining historic structures, they are important in defining the character of the area and are landmarks on LeBreton Flats.

DESCRIPTION OF HERITAGE ATTRIBUTES

The following attributes of each structure contribute to the overall understanding and heritage value of the Ottawa Water Works complex.

Water Works Building

- two-storey massing with one storey, flat roofed addition at south end of building
- rusticated limestone construction, laid in even courses
- flat roof with bracketed metal cornice
- five square stone chimneys
- heavy limestone secondary cornice between the first and second storey featuring brackets and smooth stone frieze
- double doors with arched transom window on north and east sides
- smooth stone drip course between foundation and bottom of the ground floor windows
- tall segmentally-arched four-over-four sash windows arranged in pairs on the ground floor with stone voussoirs and keystones
- round arched two-over-two sash windows on the second storey
- round windows along the west façade with stone window surrounds
- rusticated stone pilasters
- date stones on the east and north facades of the building
- decorative stone details including brackets, voussoirs, corner pilasters and keystones
- pedestrian bridge leading to second storey entrance on east side of building
- limestone retaining walls
- interior features including:
    - original roof construction comprised of iron beams separating narrow brick segmental vaults, visible inside the ground floor, pump room

- marble plaque commemorating the construction of the original building in 1874, inscribed with Thomas Keefer's name and the names of the chairman and members of the Ottawa Water Works Commission
- marble plaque commemorating the expansion of the pumping station 1899-1901
- pressure gauge with decorative iron work
- double staircase from the ground floor that merges into a single staircase to the second storey of the building

Open Aqueduct

- narrow open channel excavated from bedrock with uneven stone edges
- soft landscaped edges including low shrubs such as sumac and honeysuckle and a deciduous trees including mature group of black willow on the west side of the headworks
- limestone pitching along the north and south sides of the bank between the Broad Street Bridge and the Central Canada Railway Bridge
- remnant limestone sluice gate abutments on the north and south side of the channel east of the Central Canada Railway Bridge
- headworks with sluice gate at the Ottawa River
- forebay at the pumping station
- channeled tailrace under Pooley's Bridge extending north

Covered Aqueduct

- historical alignment following the original route of Ottawa Street from the headworks running east to meet the open aqueduct at the Lloyd/Lett Street bridge.

Stone Bridges

- Central Canada Railway Bridge, Broad Street Bridge, Booth Street Bridge, and Lloyd/Lett Street Bridges over the open aqueduct characterized by:
  - low, single arch, closed-spandrel form
  - stone construction laid in regular courses with piers, voussoirs and keystones
- Pooley's Bridge
  - triple arched, closed-spandrel form
  - stone construction laid in random courses with parapets, voussoirs and keystones
  - metal railing with concrete base

Views

- The following views reinforce the heritage value of the Ottawa Water Works as a cultural landscape:

- the view looking east from the Central Canada Railway Bridge to the Broad Street Bridge
- the view looking west from the Broad Street Bridge to the Central Canada Railway Bridge
- the view north and south from Pooley's Bridge of the tailrace and the Water Works Building
- the view looking northeast from the Lloyd/Lett/Grand Trunk Railway Bridge towards the forebay and Water Works Building

BY-LAW NO. 2024 - 147

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A by-law of the City of Ottawa to designate Ottawa Water Works Complex, to be of cultural heritage value or interest.

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Enacted by City Council at its meeting of April 3, 2024.

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LEGAL SERVICES
HNM/

COUNCIL AUTHORITY:
City Council February 21, 2024
Agenda Item 15.1.1
(Built Heritage Committee Report No. 11)