



REPORT

Cultural Heritage Impact Statement

New Civic Development for The Ottawa Hospital, Carling Avenue at Prince of Wales Drive and Preston Street, City of Ottawa, Ontario

Submitted to:

Parsons Inc.

c/o Ronald Clarke, MCIP, RPP
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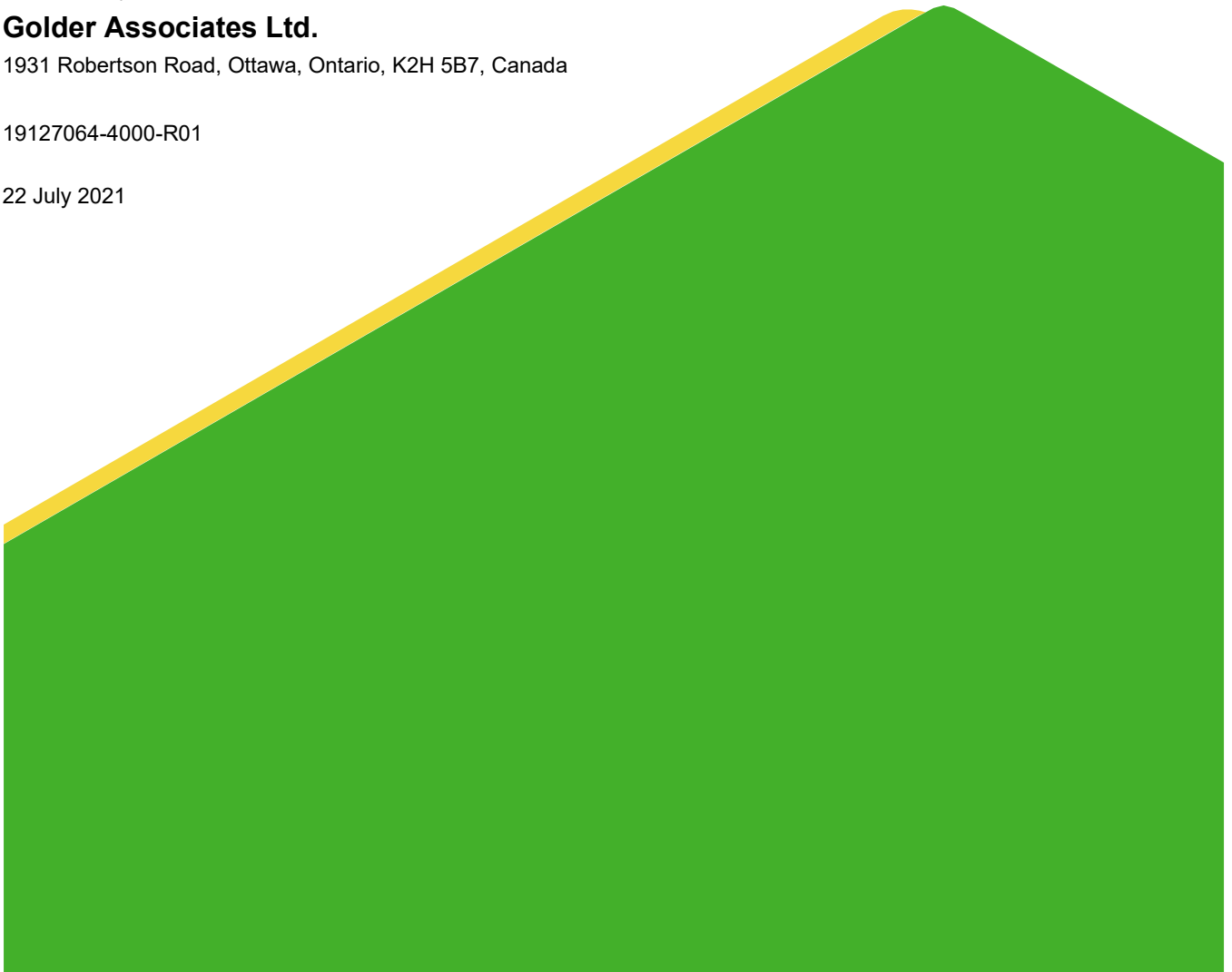
Submitted by:

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Distribution List

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Acknowledgements

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Executive Summary

The Executive Summary summarizes only the key points of the report. For a complete account of the results and conclusions, as well as the limitations of this study, the reader should examine the report in full.

In February 2020, Parsons Inc. (Parsons) retained Golder Associates Ltd. (Golder) to conduct a Cultural Heritage Impact Statement (CHIS) for the New Civic Development of The Ottawa Hospital (the Site) on Carling Avenue at Prince of Wales Drive and Preston Street in the City of Ottawa, Ontario. The Site is intended to replace the existing Civic Campus for The Ottawa Hospital (TOH) at 1053 Carling Avenue and become the major referral centre for Eastern Ontario, Western Quebec, and parts of Nunavut, as well as the home of the Eastern Ontario Trauma Centre and a range of specialized services, research, and education facilities (the Project).

A Hospital Land Lease enabled in 2018 through a Federal Land Use Design and Transaction Approval (FLUDTA) created the 20-hectare Site, which is bound by Carling Avenue on the north, Preston Street and Prince of Wales Drive on the east, and the Canadian Experimental Farm on the west and southwest. Within the west portion of the Site is the Sir John Carling Building Annex, a Recognized Federal Heritage Building that was connected to the Sir John Carling Building until the latter was demolished in 2014. A process has been initiated to demolish the Annex and, following commitments made in 2018, the Project will incorporate design and interpretive elements that reference the cultural heritage significance of the Annex. Although the Project is recognized as an approved use under the FLUDTA, and the area is to be amended in the Farm Management Plan, the west portion of the Site presently remains within the designated place of the Central Experimental Farm National Historic Site of Canada (CEF NHSC). On the west and south the Site is adjacent to other Recognized and Classified Federal Heritage Buildings within the CEF NHSC, including those of the Dominion Observatory Campus in the west and the William Saunders Building in the south. Adjacent to the northeast corner of the Site is the Rideau Canal NHSC and UNESCO World Heritage Site (Rideau Canal NHSC/WHS), also recognized as a Canadian Heritage River.

Following guidance developed by the Ministry of Heritage, Sport, Tourism and Cultural Industries (MHSTCI), City of Ottawa *A guide to preparing cultural heritage impact statements*, and Canada's Historic Places *Standards and Guidelines for the Conservation of Historic Places in Canada* (2010), this CHIS identifies the heritage policies applicable to new development, summarizes the Site's geography and history, and identifies the built heritage resources and cultural heritage landscapes potentially impacted by the Project. Based on this understanding, the CHIS assesses the potential impacts of the Project and recommends conservation or mitigation strategies to avoid or reduce adverse effects.

Research, field investigations, shadow studies, three-dimensional view modelling, and assessment conducted for this CHIS has determined that without mitigation the Project will result in:

- a minor, irreversible and permanent adverse impact through alteration of the CEF NHSC
- a negligible, irreversible, and infrequent adverse impact through shadowing to two Recognized Federal Heritage Buildings (Observatory House, Building No. 2 and Geophysical Laboratory, Building No. 3)
- a minor, irreversible and permanent adverse impact through changes to existing views of the CEF NHSC from the Rideau Canal NHSC/WHS and of the William Saunders Building Recognized Federal Heritage Building from the south.

- a minor, reversible, and frequent adverse impact to the CEF NHSC through use of an access route for primary ambulance circulation
- risk of major, irreversible, and infrequent adverse impact to the South Azimuth Building when Maple Drive is converted to use as the primary ambulance route
- potential risk of major, irreversible, and infrequent adverse impact from land disturbances during construction and operation

Based on these results, Golder recommends that the TOH consider the following mitigation measures, which will serve to substantially reduce or remove the identified adverse impacts:

- Screen the Project on its east, west, and south borders using trees and other landscape elements to reduce the impact to existing views of the CEF NHSC from the Rideau Canal NHSC/WHS, Price of Wales Drive section of the Queen Elizabeth Driveway cultural landscape, and of the William Saunders Building Recognized Federal Heritage Building
 - All future site plan applications should include further study and detailed design to screen the Project's borders, taking cues from the existing vegetation and shelterbelts within the CEF and considering landscape treatments that reflect and protect the CEF's rural picturesque character and its values as a "farm within the city".
- To remove the risk for construction-related impacts:
 - Conduct precondition surveys of all Federal Heritage Buildings adjacent to the Site
 - Implement site control and communication
 - Clearly mark on Project mapping the location of all adjacent Federal Heritage Buildings and communicate this to project personnel prior to mobilization.
 - Create physical buffers
 - Erect temporary fencing or physical barriers at the work area boundaries to prevent accidental collision with the adjacent Federal Heritage Buildings
 - Manage fugitive dust emissions
 - Draft a fugitive dust emissions plan following practices outlined in the *Ontario Standards Development Branch Technical Bulletin: Management Approaches for Industrial Fugitive Dust Sources* (2017).
 - Monitor for vibration impact during adjacent construction
 - Conduct ground vibration monitoring at the work area boundaries and/or adjacent Federal Heritage Buildings. The monitoring should use a digital seismograph capable of measuring and recording ground vibration intensities in digital format in each of three (3) orthogonal directions. This instrument should also be equipped with a wireless cellular modem for remote access and transmission of data.
 - The installed instrument should be programmed to record continuously, providing peak ground vibration levels at a specified time interval (e.g., 5 minutes) as well as waveform signatures of any ground vibrations exceeding a threshold level that would be determined during monitoring (e.g.,

between 6-12 mm/s). The instrument should also be programmed to provide a warning should the peak ground vibration level exceed the guideline limits specified. In the event of either a threshold trigger or exceedance warning, data would be retrieved remotely and forwarded to designated recipients.

- If vibration has exceeded the guideline limits specified, a stop work order should be issued immediately and the adjacent Federal Heritage Buildings promptly inspected for any indication of disruption or damage. If identified, the evidence of disturbance or damage should be documented, then closely monitored during construction for further change in existing conditions. Once work is complete, a post-construction vibration monitoring report or technical memorandum should be prepared to document the condition of the heritage attributes of the properties listed above and recommend appropriate repairs, if necessary.
- Install non-visually intrusive bollards on the northwest, west, and southwest sides of the South Azimuth Building (Building No. 8) to remove the risk of collision by an emergency vehicle
- As much as is practicable, limit use of de-icing salts in the vicinity of the South Azimuth Building (Building No. 8) and periodically monitor the condition of the building's masonry for impact from salt damage. In the event damage is noted, take immediate action such as treating the masonry with a salt repellent or switch to a calcium or magnesium chloride product.

Provided these mitigation measures are implemented, the overall effects of the Project will range from no impact to negligible adverse impact. The Site will remain publicly accessible and through use of landscaping treatments would also serve to soften the visual intrusion of recent development on the north side of Carling Avenue on the CEF NHSC and Rideau Canal NHS/WHS. Further, any negligible effects that remain after mitigation will be outweighed by the positive social impacts associated with the Project as a healthcare facility.

Golder therefore recommends that the City of Ottawa:

- ***approve the Project as currently proposed.***

Study Limitations

Golder Associates Ltd. (Golder) has prepared this report in a manner consistent with the guidelines developed by the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI), City of Ottawa, and Canada's Historic Places, subject to the time limits and physical constraints applicable to this report.

This report has been prepared for the specific site, design objective, developments and purpose described to Golder by Parsons Corporation (the Client). The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

The information, recommendations and opinions expressed in this report are for the sole benefit of the Client. No other party may use or rely on this report or any portion thereof without Golder Associates Ltd.'s express written consent. If the report was prepared to be included for a specific permit application process, then upon the reasonable request of the Client, Golder Associates Ltd. may authorize in writing the use of this report by the regulatory agency as an Approved User for the specific and identified purpose of the applicable permit review process. Any other use of this report by others is prohibited and is without responsibility to Golder Associates Ltd. The report, all plans, data, drawings and other documents as well as electronic media prepared by Golder Associates Ltd. are considered its professional work product and shall remain the copyright property of Golder Associates Ltd., who authorizes only the Client and Approved Users to make copies of the report, but only in such quantities as are reasonably necessary for the use of the report by those parties. The Client and Approved Users may not give, lend, sell, or otherwise make available the report or any portion thereof to any other party without the express written permissions of Golder Associates Ltd. The Client acknowledges the electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore the Client cannot rely upon the electronic media versions of Golder Associates Ltd.'s report or other work products.

Unless otherwise stated, the suggestions, recommendations and opinions given in this report are intended only for the guidance of the Client in the design of the specific project.

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APPENDIX C

Shadow Impact Study (HDR Inc.)

APPENDIX D

Modelled Views (HDR Inc.)

1.0 INTRODUCTION

In February 2020, Parsons Inc. (Parsons) retained Golder Associates Ltd. (Golder) to conduct a Cultural Heritage Impact Statement (CHIS) for the New Civic Development of The Ottawa Hospital (the Site) on Carling Avenue at Prince of Wales Drive and Preston Street in the City of Ottawa, Ontario (Figure 1 and Figure 2). The Site is intended to replace the existing Civic Campus for The Ottawa Hospital (TOH) at 1053 Carling Avenue and become the major referral centre for Eastern Ontario, Western Quebec, and parts of Nunavut, as well as the home of the Eastern Ontario Trauma Centre and a range of specialized services, research, and education facilities (the Project).

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



Following guidance developed by the Ministry of Heritage, Sport, Tourism and Cultural Industries (MHSTCI), City of Ottawa *A guide to preparing cultural heritage impact statements*, and Canada's Historic Places *Standards and Guidelines for the Conservation of Historic Places in Canada* (2010), this CHIS:

- outlines the study's objectives and scope, and the methods used to assess impacts to the built heritage resources and cultural heritage landscapes within and adjacent to the Site
- summarizes the international, federal, provincial, and municipal heritage policies relevant to integrating new development with built heritage resources and cultural heritage landscapes
- describes the Site's geographic and historical context
- inventories the Site's built environment and landscape setting and provides an understanding of the cultural heritage significance of the built heritage resources and cultural heritage landscapes within and adjacent to the Site
- describes the proposed Project and assesses the potential adverse impacts, and
- recommends mitigation measures to ensure that the significance and heritage attributes of the built heritage resources and cultural heritage landscapes within and adjacent to the Site are conserved.



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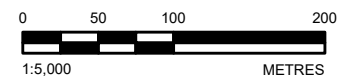
-  HISTORIC SITES AND MONUMENTS BOARD PLAQUES
-  OTTAWA HOSPITAL NEW CAMPUS SITE STUDY AREA
-  O-TRAIN STATION
-  O-TRAIN RAILWAY TRACK
-  ROADWAY
-  WETLAND
-  RIDEAU CANAL WORLD HERITAGE SITE AND NATIONAL HISTORIC SITE OF CANADA

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2018
2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
3. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28



CLIENT

PARSONS INC.

PROJECT

CULTURAL HERITAGE IMPACT STATEMENT FOR THE NEW CIVIC DEVELOPMENT FOR THE OTTAWA HOSPITAL

TITLE

LOCATION OF PROPERTY

CONSULTANT



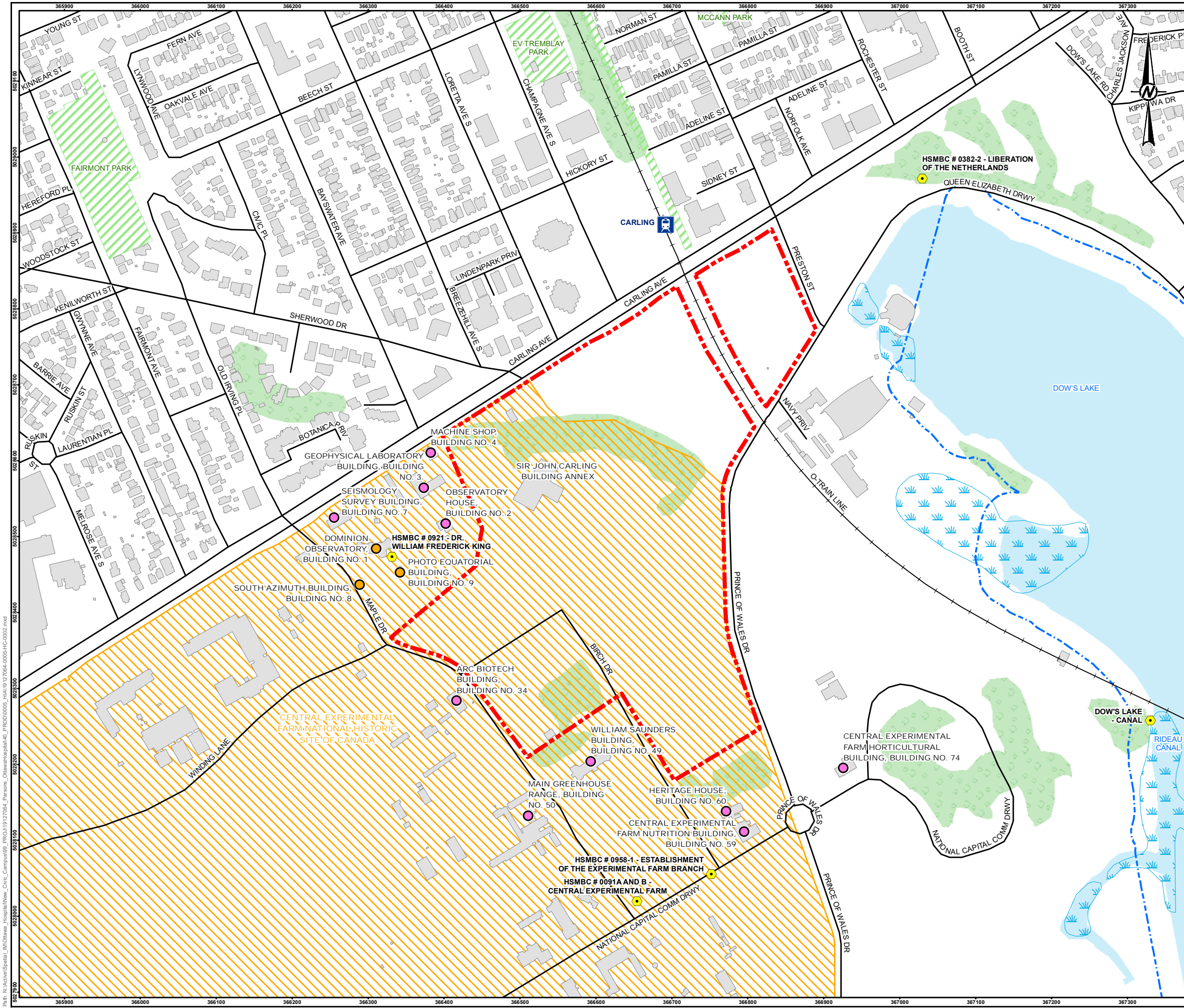
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DESIGNED	AM
PREPARED	BR
REVIEWED	---
APPROVED	---

PROJECT NO.
19127064

CONTROL
0005

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A

FIGURE
1

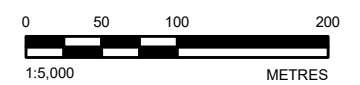


SCALE 1:125,000

- LEGEND**
- CLASSIFIED FEDERAL HERITAGE BUILDINGS
 - RECOGNIZED FEDERAL HERITAGE BUILDINGS
 - HISTORIC SITES AND MONUMENTS BOARD PLAQUES
 - CENTRAL EXPERIMENTAL FARM NATIONAL HISTORIC SITE OF CANADA
 - OTTAWA HOSPITAL NEW CAMPUS SITE STUDY AREA
 - O-TRAIN STATION
 - O-TRAIN RAILWAY TRACK
 - ROADWAY
 - BUILDING FOOTPRINT
 - WETLAND
 - RIDEAU CANAL WORLD HERITAGE SITE AND NATIONAL HISTORIC SITE OF CANADA
 - 30 METRE BUFFER FROM THE EDGE OF THE RIDEAU CANAL
 - PARKLAND
 - WOODED AREA

NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2018
2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
3. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28



CLIENT
PARSONS INC.

PROJECT
CULTURAL HERITAGE IMPACT STATEMENT FOR THE NEW CIVIC DEVELOPMENT FOR THE OTTAWA HOSPITAL

TITLE
SITE PLAN

CONSULTANT	YYYY-MM-DD	7/19/2021
DESIGNED	AM	
PREPARED	BR	
REVIEWED	---	
APPROVED	---	

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FIGURE **2**

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2.0 SCOPE AND METHOD

The objectives of this CHIS were to:

- understand the Site's existing conditions and the cultural heritage significance of built heritage resources and cultural heritage landscapes within and adjacent to the Site
- identify the adverse impacts from the proposed Project on the significance and heritage attributes of built heritage resources and cultural heritage landscapes within and adjacent to the Site
- consider alternatives to avoid or reduce the identified impacts
- recommend mitigation or conservation measures, where required.

To meet the study's objectives, Golder:

- reviewed applicable federal, provincial, and municipal heritage policies
- engaged heritage planners at the National Capital Commission (NCC), Parks Canada, and City of Ottawa
- traced the Site's history through secondary sources and mapping
- conducted field investigations to document the existing conditions and to understand the wider built and landscape context
- assessed the impact of the Project on the built heritage resources and cultural heritage landscapes within and adjacent to the Site using international, federal, provincial, and municipal cultural heritage guidelines and policies
- developed recommendations for future action based on international, federal, provincial and municipal conservation guidance

Due to access restrictions resulting from the COVID-19 pandemic, all information was compiled from online sources, and Golder's reference library and previous reports.

Cultural Heritage Specialist Randy Hahn conducted field investigations on 8 January 2021, which included photographing the Site and the surrounding context with a Panasonic Lumix DMC-TS4 Digital Camera.

Following the results of a meeting with NCC, Parks Canada, and City of Ottawa heritage staff on 16 February 2021, Golder prepared this CHIS to follow the municipal reporting requirements outlined in the City of Ottawa *A guide to preparing cultural heritage impact statements* and MHSTCI *Ontario Heritage Tool Kit: Heritage Resources in the Land Use Planning Process*. Several widely recognized manuals related to determining impacts and conservation approaches to cultural heritage resources were also consulted, including:

- *ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* (ICOMOS 2011)
- *Standards and Guidelines for the Conservation of Historic Places in Canada* (Canada's Historic Places 2010)
- *Heritage Planning: Principles and Process* (Kalman & Létourneau 2020)
- *Well-Preserved: The Ontario Heritage Foundation's Manual of Principles and Practice for Architectural Conservation* (Fram 2003)

- *Guidelines for Landscape and Visual Impact Assessment, Third Edition* (Landscape Institute 2013)
- *The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning: 3 (2nd Edition)* (Historic England 2017)
- *Setting of Historic Assets in Wales* (Cadw 2017)
- *Informed Conservation: Understanding Historic Buildings and their Landscapes for Conservation* (Clark 2001)

2.1 Record of Engagement

Table 1 summarizes the results of engagement conducted for this CHIS. As mentioned above, Golder also attended a meeting on 16 February 2021 with Heather Thomson (NCC), Lesley Collins (City of Ottawa), and Susan Millar (Parks Canada) that decided the scope of the study should follow provincial guidance and the City of Ottawa *A guide to preparing cultural heritage impact statements*.

Table 1: Consultation Table

Contact	Information Request	Response Received
Ashley Kotarba, Heritage Planner, Planning, Infrastructure and Economic Development Department, City of Ottawa	Query sent via email on March 30, 2020 to inquire about the potential for any heritage resources located within or adjacent to the Site, and associated information sources.	Response received via email on March 31, 2020 providing a map with the heritage buildings within or near the Site.
Heather Thomson, Heritage Program Manager, National Capital Commission	Query sent via email on March 30, 2020 to inquire about the potential for any heritage resources located within or adjacent to the Site, and associated information sources.	<p>Response received via email on April 6, 2020 advising that the following sites, recognized for their significance at the local, national, and international levels, are of particular interest:</p> <ul style="list-style-type: none"> ■ The Rideau Canal ■ The Central Experimental Farm ■ Federal Heritage Buildings, especially the Dominion Observatory Complex <p>For each, extensive information and links to additional sources were provided as well as contacts at Parks Canada.</p>

Contact	Information Request	Response Received
Tom Green, Acting Planner, Ontario Waterways Unit, Rideau Canal National Historic Site,	Query sent via email on March 30, 2020 to inquire about the potential for any heritage resources located within or adjacent to the Site, and associated information sources. Asked if there were specific concerns specific to impacts on the cultural heritage values of the Rideau Canal.	<p>Response received via email on April 2, 2020 advising that Parks Canada is interested in the visual impact of the Project on the Rideau Canal as experienced from the CEF, and the associated impact on visitor experience of the canal. Also provided was a map of the Rideau Canal boundary and suggestions that the CHIS impact assessment.</p> <ul style="list-style-type: none"> ■ be consistent with the <i>Rideau Canal NHS Management Plan (2005)</i> and the <i>Rideau Canal NHS Commemorative Integrity Statement</i>; ■ be consistent with the <i>Rideau Canal WHS Management Plan (2005)</i> and the <i>Rideau Canal WHS Statement of Outstanding Universal Value (2007)</i>; ■ ensure that any development of the Carling Avenue East Site does not have a negative impact on the commemorative integrity of the Rideau Canal NHS; ■ ensure that the Outstanding Universal Value, integrity and authenticity of the Rideau Canal WHS are maintained, enhanced and presented; ■ acknowledge and respect the Buffer Zone established to protect the Outstanding Universal Value of the Rideau Canal WHS; ■ safeguard the heritage character of corridor shore lands and enhance the setting of the sector by promoting land development and uses that are consistent with

Contact	Information Request	Response Received
		<p>the character of the place, in terms of type, scale and density;</p> <ul style="list-style-type: none"> ■ ensure that the visual setting and broader viewsheds pertinent to this sector of the Rideau Canal are protected and enhanced; and ■ maintain and enhance the unique park landscape of the surrounding environment of the Rideau Canal. <p>These have been considered as part of the impact assessment in Section 7.2 of this CHIS.</p>
Lilia Lockwood, Program/Policy Officer III, FHBRO	Query sent via email on March 31, 2020 to inquire about the potential for any heritage resources located within or adjacent to the Site, and associated information sources.	Response received via email on April 3, 2020 advising that request was forwarded to colleague, Jennifer Drew. No response received at time of writing.
Yuliana Ortiz, Planning Coordinator, Agriculture and Agri-Food Canada	Query sent via email on March 31, 2020 to inquire about the potential for any heritage resources located within or adjacent to the Site, and associated information sources.	No response received at time of writing.

3.0 POLICY FRAMEWORK

Cultural heritage resources are recognized, protected, and managed through several international, federal, provincial, and municipal planning and policy regimes. Although these have varying levels of authority, all are considered for decision-making in the cultural heritage environment.

3.1 International Heritage Policies & Guidance

Canada's national and provincial legislation and policies for cultural heritage are informed by a number of international agreements such as the 1964 *International Charter for the Conservation and Restoration of Monuments and Sites (Venice Charter)*, 1983 *Canadian Appleton Charter for the Protection and Enhancement of the Built Environment*, and the 1979 (updated 2013) *Australia International Council on Monuments and Sites (ICOMOS) Charter for Places of Cultural Significance (Burra Charter)* (Public Works Canada 1994:Vol.1, 1). The latter is important for pioneering "values based" evaluation and management, an approach central to Canadian federal, and provincial and territorial legislation and policies for identifying and conserving cultural heritage.

Additionally, ICOMOS has developed guidance for conducting heritage impact assessments for "Cultural World Heritage Properties" (ICOMOS 2011), and these also provide "best practice" approaches for all historic assets.

3.2 Federal Heritage Policies & Guidance

Although planning and heritage are considered provincial matters under the *Constitution Act 1867-1982*, heritage resources owned by the federal government are considered assets and "real property" subject to the *Financial Administration Act*. To address how these assets should be managed, the Treasury Board of Canada has developed the *Treasury Board Policy on the Management of Real Property*, which advises that real property be managed in a sustainable and financially responsible manner, throughout its life cycle, to support the cost-effective and efficient delivery of government programs (Section 5.1). From this, the objective is that "cultural and environmental stewardship...contributes to the preservation and protection of our heritage and the environment" (Section 5.2). Recognition of federal heritage property can include National Historic Site of Canada designation or categorization by the Federal Heritage Buildings Review Office (FHBRO) as either "Classified" or "Recognized". Federal departments and Crown Corporations may develop policies or plans for cultural heritage to meet their requirements under the *Treasury Board Policy*, and work with FHBRO to manage cultural heritage resources.

3.2.1 Parks Canada Agency

In accordance with the *Parks Canada Agency Act*, Parks Canada establishes national goals to protect federal heritage buildings and national historic sites, and to develop policies, standards, and guidelines in consultation with other federal departments and agencies (Parks Canada 2020). Parks Canada is responsible for the Historic Sites and Monuments Board of Canada (HSMBC), the conservation of national parks, national marine conservation, and national historic sites. The Agency is also responsible for the protection of all buildings and other works located on its land, including Classified and Recognized federal heritage buildings. This does not include national historic sites administered by other departments or agencies.

3.2.1.1 Federal Heritage Building Review Office Guidance

Through Parks Canada, the Federal Heritage Buildings Review Office (FHBRO) has a mandate to help departments preserve their heritage buildings, in accordance with the *Treasury Board Policy on Management of Real Property* (2006). It provides expert advice on conservation of federal heritage buildings and is chaired by the Manager of FHBRO. Federal real property is submitted to FHBRO for a heritage evaluation when it meets the following three conditions:

- it is 40 years of age or older
- it is owned, or is being considered for purchase, by a federal department
- it meets the definition of “building”, based on the following three criteria:
 - it is capable of containing or sheltering human activities
 - it has an interior space, an exterior shell and a roof
 - and it is fixed in a permanent specific location

To be designated a Classified federal heritage building, a structure must receive a score of between 75 and 135 points out of a total of 135 (Parks Canada 2006:8). For a building to be designated as a Recognized federal heritage building, it must obtain a score of between 50 and 74 points. A Heritage Character Statement is then developed by FHBRO to explain the reasons for designation and its “character-defining elements” or features that contribute to its significance.

3.2.1.2 **Canada’s Historic Places Standards and Guidelines for the Conservation of Historic Places in Canada & Canadian Register of Historic Places**

In 2003 and 2004, Parks Canada initiated the Canada’s Historic Places collaborative partnership with representatives from each province and territory to develop the *Standards and Guidelines for the Conservation of Historic Places in Canada* (CHP *Standards and Guidelines*) and *Canadian Register of Historic Places* (CRHP).

The CRHP is a national database of historic places, and for consistency in defining the significance of historic places in multiple jurisdictions across Canada uses a “Statement of Significance” (SOS) that includes three parts:

- **Description of Historic Place** that explains what the place consists of in physical terms, where it is located, and what are its physical limits.
- **Heritage Value** that explains why the place is of value to the community, province, territory or nation
- **Character-defining Elements** that sets out the key features that must be conserved in order for the place to continue to have value (Canada’s Historic Places 2011:3).

To provide “fundamental and sound principles and practices that can safeguard historic places” as well as a national response to international agreements such as the Burra Charter, the CHP *Standards and Guidelines* defines “conservation” as all actions or processes that are aimed at safeguarding the character-defining elements of an historic place to retain its heritage value and extend its physical life” and three conservation “treatments” — preservation, rehabilitation, and restoration— to guide intervention on a historic place. Although in theory a single treatment would be selected, nearly all projects involve a combination of all three depending on a variety of factors including level of understanding, practicality, and projected future uses.

A key principle explicitly or implicitly repeated in the CHP *Standards and Guidelines* is minimal intervention, that is, “doing enough, but only enough to meet realistic objectives while protecting heritage values” (CHP 2010:26). On any given project, minimal intervention can mean very little work, or a substantial amount—the degree is based on whatever is required to protect the heritage value of a place.

The CHP *Standards and Guidelines* were revised in 2010 and adopted by all provinces and territories except Ontario, although many Ontario municipalities have formally adopted the document. The City of Ottawa adopted

the CHP *Standards and Guidelines* in 2008 along with the SOS format, which is similar in intent to the provincial approach (see Section **Error! Reference source not found.**).

3.2.1.3 *National Historic Site of Canada Program*

The Historic Sites and Monuments Board of Canada has been mandated since 1919 to provide recommendations to the Canadian government on the designation of places, persons and events that have marked and shaped Canada (Parks Canada 2018). Most applications for designation are presented to the Board by Canadian individuals and organizations, but to ensure representation of the “country’s evolving history and heritage”, Parks Canada developed the *National Historic Sites of Canada System Plan* (2000:5).

Overall, the program’s objectives are to:

- to foster knowledge and appreciation of Canada's past through a national program of historic commemoration; and
- to ensure the commemorative integrity of national historic sites by protecting and presenting them for the benefit, education and enjoyment of this and future generations, in a manner that respects the significant and irreplaceable legacy represented by these places and their associated resources.
- To encourage and support the protection and presentation by others of places of national historic significance that are not administered by Parks Canada

The term “commemorative integrity” refers to “the health or wholeness of an historic site” with a national historic site possessing commemorative integrity when:

- the resources that represent or symbolize its importance are not impaired or under threat
- the reasons for the site's national significance is effectively communicated to the public, and
- the site’s heritage values are respected by all whose decisions or actions affect the site.

The national significance of an NHSC, its resources, and key messages, as well as objectives for managing this “Level 1” or national significance, are articulated in a three-part “Commemorative Integrity Statement” (CIS). The CIS also identifies an NHSC’s “Level 2” values, which are those resources of regional or local significance.

3.2.1.4 *Rideau Canal NHSC/WHS Policies & Guidance*

3.2.1.4.1 *Rideau Canal National Historic Site Management Plan and Commemorative Integrity Statement*

Parks Canada uses the *Rideau Canal National Historic Site Management Plan with Commemorative Integrity Statement* (CIS) (2006) to establish the long-term strategic direction for the management of the Rideau Canal NHSC, which was designated by the HSMBC in 1925. This plan seeks to ensure that the commemorative integrity and natural values of the site are maintained or enhanced, guides appropriate public use, and supports cultural resource management principles and practices in the decision-making process. The plan also emphasizes the tourism and recreation values of the Rideau, promoting it as a unique cultural heritage experience dependent on its continued operation as a fully navigable historic waterway. The plan also shows that that the historic values, natural features, scenic beauty, and diversity of the cultural landscapes of the Rideau Canal have unique heritage character and should be respected by government, commercial interests, and private residents.

For development adjacent to the Rideau Canal the Plan includes the statement that Parks Canada will “encourage the use of architectural styles in keeping with the architectural heritage of the canal corridor for new construction adjacent to the canal and lockstations” (Parks Canada 2005b: 20).

The values for the “designated place” of the site identified in the *Rideau Canal National Historic Site Commemorative Integrity Statement* (CIS) are its:

- the engineering achievement of the construction of the Canal;
- its continuous seasonal operation since 1832;
- the survival and integrity of the Canal system with the majority of its original built resources intact;
- the continuity and integrity of the lockstations and the sense of a complete “system” that these stations convey;
- the historic, ecological and visual associations with the certain shore-lands and communities along the waterway which contributes to the unique historical environment of the Canal;
- the extensive wetlands and lakes of the Canal which reveal the relationship between Canal construction and the natural environment and which are an integral part of the unique historical environment of the waterway.

The CIS further states that this designated place will be unimpaired or not under threat when:

- through navigation of the Canal system is maintained to help assure the preservation of the unique historical environment and safeguard the level one cultural resources;
- the cultural resources related to the military period are safeguarded according to Parks Canada’s Cultural Resource Management [CRM] Policy (see detailed description of cultural resources below);
- the existing manual mode of operation of locks, dams and weirs on the system is maintained;
- the visual relationship between the Canal and the heritage landscape in the central core of Ottawa remains evident and intact;
- the views and visual linkages which enhance the military character of the Kingston harbor landscape and portray the relationship between the fortifications, the harbor and the Canal remains evident and intact;
- the heritage character of corridor shore-lands are safeguarded from inappropriate development or uses;
- the visual relationship between the Merrickville Blockhouse and the heritage landscape adjacent to the site remains intact;
- the heritage character of those identified corridor communities are safeguarded;
- the landmarks, view scapes and natural ecosystem features of the Canal’s islands, shore-lands and wetlands that are related to the construction of the Canal and which are part of the Canal’s unique historical environment are safeguarded;
- the level one historic values of the designated place are effectively communicated to the public.

3.2.1.4.2 Rideau Canal World Heritage Site Management Plan and Rideau Corridor Landscape Strategy

In 2007, the United Nations Education Scientific and Cultural Organization (UNESCO) inscribed the Rideau Canal and its associated fortifications on the World Heritage List. Parks Canada is responsible for the World Heritage Site designation and prepared a *Rideau Canal World Heritage Site Management Plan* (2005) identifying the values to be protected, the legislative and policy framework, how the site will be managed, and the mechanisms for monitoring and periodic reporting. Importantly, the *World Heritage Site Management Plan* indicates that Parks Canada must ensure that any public works proposal will maintain the authenticity of the shoreline and cultural resources, as well as the environmental and scenic qualities of the Rideau Canal setting. This management was assisted by establishing a 30-m buffer zone to the borders of the Canal.

The World Heritage Committee recommended consideration be given to strengthen visual protections of Rideau Canal. Parks Canada followed this recommendation and in 2012 developed the *Rideau Corridor Landscape Strategy* (Parks Canada & Dillon 2012). To document the existing conditions and define their visual character, the *Strategy* divided the Rideau Corridor into four “landscape character areas” (LCAs) or sectors, each with subsectors, and used aerial photography and GIS mapping to define a number of “landscape character units” (LCUs) within each landscape area. Each LCU is based primarily on land use, ranging from “Urban (C1)” to “Utility Landscapes (C12)” for “cultural landscapes,” and “Lakes/ Open Water (N1)” to “Significant Landform (N7)” for “natural landscapes”.

The Site is associated with a landscape character area the *Strategy* called “Sector 1: Rideau Canal - Ottawa Locks to Hogs Back Locks”, and specifically “Subsector 1a. Ottawa Locks (Locks 1-8) to Hartwells Locks (Locks 9-10)”. For this subsector it identified several values, views and visual relationships including:

- the excavated channel and Canal within an urban, historic context
- the Rideau Canal Pathway, Colonel By Drive, and associated greenspace (Carleton University, the Experimental Farm and Arboretum, Dow’s Lake)
- the bridges and views to the Canal from them
- the Rideau Skateway and Winterlude
- Hartwells Lockstation and turning basin

For the area associated with the Site, The *Strategy* defined the LCUs as “Agricultural/ Farmland (C7)” in the west and “Managed Landscape (C8)” (e.g. parks, campgrounds, golf courses) in the east. However, this appears to have been an error as when the *Strategy* was drafted the Sir John Carling Building with east and west annexes was still standing, and the Dominion Observatory Campus does not reflect an “Agricultural/ Farmland” LCU. The Site and adjacent area would therefore have been better characterized as “Institutional/ Campus (C9)”.

By identifying the visual character of the Rideau Corridor, the purpose of the *Strategy* was to identify the sensitivities to change of each LCU, and by extension each LCA. Yet the rating of sensitivity appears to have been based on existing conditions, not historic landscape character, as well as a preference among public survey participants for “natural landscapes” over views that include the built environment. A rating of sensitivity to change is also predicated on correct identification of landscape character, which as described above may not be the case for the Site.

3.2.2 Agriculture and Agri-Food Canada

3.2.2.1 Central Experimental Farm National Historic Site of Canada Management Plan and Commemorative Integrity Statement

Agriculture and Agri-Food Canada (AAFC) administers the CEF NHSC and has developed the *Central Experimental Farm National Historic Site Management Plan and Commemorative Integrity Statement (CIS)* to manage its cultural heritage values. The *Management Plan* addresses the diverse pressures and expectations facing the CEF NHSC, and outlines a vision and steps to protect, preserve, and enhance the CEF NHSC's values and heritage integrity.

The values of the CEF NHSC are articulated in the CIS and associated not only with tangible resources such as buildings, field patterns, plant collections, and the designed landscape, but also important intangible elements of the NHSC designation such as the CEF's research operations. Central to the CEF NHSC's cultural heritage value is its cultural landscape, which is divided into three sections; the entry zone, the core zone, and the support zone (AAFC 2013). As outlined in the CIS, the character of this cultural landscape and designated place includes:

- the relationships between the core zones, between buildings and the outdoor spaces, including the well-established system of paths and roadways, the long vistas across fields and water, and the intangible, life-giving qualities of light. All are still legible on the landscape, all enhance the aesthetic character of the Central Experimental Farm, and all reinforce the sense of historic place.
- [the pastoral character of the farm that] incorporates such features as long stretches of lawn and fields, gently rolling land, pleasing water vistas, a core of buildings attractively set among groups of mature trees and clumps of shrubbery, and winding pathways that encourage outdoor enjoyment and provide leisurely changes of experience. The orderliness and neatness which are so characteristic of the Farm are not only pleasing to the eye, but are also critical to the Farm's scientific pursuits.

The landscape features that symbolize or represent the site's national historic significance in the Central Core are:

- The expanse of lawn south of the Saunders Building;
- the effective use of topography, such as the siting of the Main Dairy Barn on a central knoll, and the use of the wooded escarpment along the east of the property to distinguish the boundary and frame the approach;
- shady, tree-lined roads and lanes; the relative density and variety of buildings, and apparent informal building placement;
- the intimate scale of the interior of the zone, and the campus-like atmosphere;
- the placement and diversity of species of trees and shrubbery;
- the traffic circle at the junction of Prince of Wales and the Driveway, which, though not established until the 1930s, serves as a distinctive landmark and entrance to the Farm and maintains the harmony between the evolved landscape and the original design; and
- the compatible scale and design of both Prince of Wales Drive and the Driveway, which have evolved from the main north-south and east-west roads in the original 1880s plan and which link the Farm to the City.

The CIS states that the objectives for the designated place of the CEF NHSC will be "unimpaired and not under threat when":

- the present boundaries and spatial balance of the Farm, which enhance understanding of the historic and on-going agricultural research function, are safeguarded, and maintained;
- the surviving 19th century landscape plan, including the core administration, scientific and farm buildings, plus the arboretum, lawns, ornamental gardens, and display beds, experimental fields, plots and shelterbelts, and circulation patterns set in a Picturesque composition, is safeguarded and maintained in accordance with recognized heritage conservation principles;
- a sufficiently large area to carry out and support the scientific research function is maintained; the character of a “farm” as defined by fields, utilitarian buildings and circulation patterns is recognized;
- the “farm within a city” remains sufficiently large to provide a contrast to the scale of urban development; and
- the historic values of the designated place are communicated to the public.

3.2.3 The National Capital Commission (NCC)

The NCC is a federal Crown corporation with a mandate to “prepare 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 may be in accordance with its national significance” (*National Capital Act*, S10. 1). This includes conservation of cultural heritage resources on federal lands owned by the NCC, and the corporation can be both a proponent for adaptive reuse and development of a federal heritage property as well as responsible for conserving its character-defining elements. The NCC follows policies established by FHBRO and has adopted the *Standards and Guidelines for the Conservation of Historic Places in Canada*. Other NCC planning documents and policy relevant to the Project are included below.

The eastern part of the Site was owned by the NCC but transferred to Public Services and Procurement Canada (PSPC) as part of the Hospital Land Lease. The NCC maintains Federal Land Use Design Approval over the Site as with other federally owned lands in the National Capital Region.

3.2.3.1 Plan for Canada’s Capital: 2017-2067

Capital planning falls under the NCC’s overall plan for the National Capital Region entitled *Plan for Canada’s Capital: 2017-1067* (2017). Its goals for cultural heritage include:

- Maintain and create the inspiring symbols and meaningful legacies that are intrinsic to Canadian identity;
- Maintain and create the distinctiveness of northern natural and cultural landscapes in the Capital Region; and,
- Conserve and enrich cultural heritage through design excellence and exemplary stewardship.

Other key policy directions include:

- The NCC will continue to work with Parks Canada to protect and enliven the Rideau Canal World Heritage Site and ensure that the settings respect the Rideau Canal World Heritage Site Management Plan submitted to UNESCO.

3.2.3.2 The Capital Urban Lands Plan

The *Capital Urban Lands Plan* (2015) is intended to provide detailed policy guidance and support for planning and stewardship of Capital urban lands on the Ontario side of the Ottawa River and property in the urban perimeter on the Quebec side. Specific objectives and sub-objectives of this plan are to:

- Create and foster high-quality and meaningful places.
 - Improve, safeguard, and enrich the Capital's cultural heritage.
 - Develop a network of Capital discovery routes.
- Support the Capital's urban green and blue space network.
 - Protect valued natural habitats and regional biodiversity.
 - Reinforce urban vegetation cover and conserve the Capital's picturesque landscapes.
 - Provide improved access to green and blue spaces year-round.
- Contribute to building a livable Capital Region.
 - Enhance the accessibility and integration of federal sites.
 - Promote sustainable urbanism and active mobility (NCC n.d.).

Guiding principles of this plan are to:

- Plan and manage the Capital's assets to enhance its symbolism, dignity, and prestige;
- Develop and manage federal lands to jointly benefit the Capital and the region;
- Apply context-sensitive, sustainable, and responsible urban planning practice; and,
- Ensure that actions reflect a spirit of openness and collaboration (NCC 2015:27).

The plan supports creative and innovative approaches to the enhancement of Capital heritage. Section 4.2.2 Capital Greenspace Network Designations identifies that: "various uses and events supportive of the animation of the Capital Greenspace Network may also be permitted under Capital Park and Capital Urban Greenspace designations, where they are appropriate to the Capital's recreation, ecological or cultural functions. Complementary uses must not exceed a site's carrying capacity and will be permitted only where the applicable designation's primary objectives are not compromised by additional uses" (NCC 2015:47). Urban greenspaces, parkway and pathway corridors, shoreline corridors adjacent to the region's waterways and other NCC parkland will promote the Capital experience through the discovery of built heritage, archaeological resources and designed verdant cultural landscapes, and by developing the potential of sites in keeping with their capacity and in a manner compatible with their character and vocation (NCC 2015:53).

In particular, the Plan acknowledges the key federal holdings in the Capital Urban Lands area such as the CEF NHSC and the Rideau Canal NHSC/WHs have rich heritage value (NCC 2015:8). It notes that there are over 60 federal buildings located within the Capital Urban Lands, with ten owned by the NCC. The heritage significance of the Capital will be preserved using context-appropriate standards which are consistent with *Standards and Guidelines for the Conservation of Historic Places in Canada*, Treasury Board Heritage Buildings Policy, Federal Heritage Buildings Review Office *Code of Practice*, the *Ontario Heritage Act*, and applicable municipal policies.

3.2.3.3 Definition and Assessment of Cultural Landscapes of Heritage Value on NCC Lands

To aid management of cultural landscapes in the National Capital Region, the NCC commissioned the *Definition and Assessment of Cultural Landscapes of Heritage Value on NCC Lands* report (Smith and Associates 2004). This identified the landscapes of “known national historic significance” which includes the CEF NHSC and Rideau Canal NHSC/WHS (Smith and Associates 2004:18, 20).

For the CEF NHSC there is map that references five zones within the NHSC: Arboretum and Public Museum in the east, Headquarters in the northeast, NRCan (National Resources Canada) associated with the Dominion Observatory Campus, and Research encompassing the central and west sections (Figure 3) (Smith and Associates 2004:27). However, there is no accompanying explanation in the text, nor are these zones referenced in the *Central Experimental Farm National Historic Site Management Plan* or *Commemorative Integrity Statement*. It should be noted that the *Definition and Assessment of Cultural Landscapes of Heritage Value on NCC Lands* is considered a secondary source to the CEF NHSC CIS.



Figure 3: Map in the *Definition and Assessment of Cultural Landscapes of Heritage Value on NCC Lands* showing the five zones within the CEF NHSC (Smith and Associates 2004:27)

The report also references the historical significance of the CEF NHSC (Smith and Associates 2004:32) and defines it as a “small-scale” landscape within the “medium-scale Rideau Canal Corridor” and as a “designed landscape” and “node with a clear federal identity as expressed by its architecture, landscape and ritual” (Smith and Associates 2004:39, 44, 47). With the Rideau Canal NHSC/WHS, the CEF NHSC is a “soft landscape: Picturesque, naturalized, informal” (Smith and Associates 2004:48).

The document also proposes the Queen Elizabeth Driveway as a cultural landscape extending east and south beyond Preston Street (where it becomes Prince of Wales Drive) to the traffic circle intersection with the National Capital Commission Scenic Driveway southeast of the Site (Smith and Associates 2004:66).

3.2.4 Canadian Heritage Rivers System

The Canadian Heritage Rivers System was established by the federal, provincial, and territorial governments to recognize Canada's most important rivers. The objective of a Canadian Heritage Rivers designation is to promote, protect and enhance a river heritage, and ensure that it is managed sustainably.

The Rideau Waterway was designated as a Canadian Heritage River System in 2000 for its outstanding human heritage and recreational values. The *Rideau Waterway: 2000–2012, Canadian Heritage River Monitoring Report* uses the Parks Canada Commemorative Integrity Statement to define the significance of this river system: “the Canal [is] a unique historical environment, including not only locks and dams but also wetlands, cottage areas, undeveloped shorelines, farms, small towns and village scenery. Taken all together, this waterway presents a living cultural landscape that is at once historic, scenic, natural, and man-made” (Parks Canada 2012: 6). In terms of recreational heritage, the skateway from Dow's Lake to downtown Ottawa is an important tourist destination for the national capital.

The Canadian Heritage Rivers Board recognized the Parks Canada *Rideau Canal National Historic Site Management Plan* as the guiding document to manage the Rideau's values. This plan incorporates the Canadian Heritage Rivers System values attributed to the Rideau Waterway, as well as a commitment to maintain these values through the management actions of Parks Canada.

3.3 Provincial Heritage Policies & Guidance

3.3.1 The *Planning Act* and *Provincial Policy Statement*

The Ontario *Planning Act* (1990) and associated *Provincial Policy Statement 2020* (PPS 2020) mandate heritage conservation in land use planning. Under the *Planning Act*, conservation of “features of significant architectural, cultural, historical, archaeological or scientific interest” are a “matter of provincial interest” and integrates this at the provincial and municipal levels through the PPS 2020. Issued under Section 3 of the *Planning Act*, the PPS 2020 recognizes that cultural heritage and archaeological resources “provide important environmental, economic, and social benefits”, and that “encouraging a sense of place, by promoting well-designed built form and cultural planning, and by conserving features that help define character, including *built heritage resources* and *cultural heritage landscapes*” supports long-term economic prosperity (PPS 2020:6,22).

The importance of identifying and evaluating built heritage and cultural heritage landscapes is recognized in two policies of the PPS 2020:

- Section 2.6.1 – *Significant built heritage resources* and *significant heritage landscapes* shall be conserved.
- Section 2.6.3 – Planning authorities shall not permit *development* and *site alteration* on *adjacent lands* to *protected heritage property* except where the proposed *development* and *site alteration* has been evaluated and it has been demonstrated that the *heritage attributes* of the *protected heritage property* will be conserved.

Each of the italicised terms is defined in Section 6.0 of the PPS 2020, and those relevant to this report are provided below:

- **Adjacent lands:** for the purposes of policy 2.6.3, those lands contiguous to a *protected heritage property* or as otherwise defined in the municipal official plan.
- **Built heritage resource:** means a building, structure, monument, installation or any manufactured or constructed part or remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community. *Built heritage resources* are located on property that may be designated under Parts IV or V of the *Ontario Heritage Act*, or that may be included on local, provincial, federal and/or international registers.
- **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.
- **Cultural heritage landscape:** means a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the *Ontario Heritage Act*; or have been included in on federal and/or international registers, and/or protected through official plan, zoning by-law, or other land use planning mechanisms.
- **Development:** means the creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the Planning Act.
- **Heritage attributes:** the principal features or elements that contribute to a protected heritage property's cultural heritage value or interest, and may include the property's built, constructed, or manufactured elements, as well as natural landforms, vegetation, water features, and its visual setting (e.g., significant views or vistas to or from a protected heritage property).
- **Protected heritage property:** 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.
- **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*.

Importantly, the definition for *significant* includes a caveat that "while some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation." The criteria for significance established by the Province, as well as the need for evaluation, is outlined in the following section.

3.3.2 Provincial Heritage Guidance

For provincial properties, heritage planning must comply with the MHSTCI *Standards and Guidelines for the Conservation of Provincial Heritage Properties* (MHSTCI *Standards and Guidelines*). Though not applicable to private or municipal projects, the MHSTCI *Standards and Guidelines* provides “best practice” approaches for evaluating cultural heritage resources and assessing impacts not under provincial jurisdiction. For heritage impact assessments, *Information Bulletin 3: Heritage Impact Assessments for Provincial Heritage Properties* (MHSTCI *Info Bulletin 3*, 2017) of the *Standards and Guidelines for the Conservation of Provincial Heritage Properties* advises on the contents and possible strategies.

To advise municipalities, organizations, and individuals on heritage protection and conservation, the Province, through the MHSTCI, has developed a series of guidance products. One is the MHSTCI *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-Specialist* (2016). This checklist provides a screening tool for a study area to identify all the known or recognized cultural heritage resources, commemorative plaques, cemeteries, Canadian Heritage River watersheds, properties with structures 40 or more years old, or potential cultural heritage landscapes. If known or potential cultural heritage resources are identified, the MHSTCI *Checklist* then advises whether further investigation as part of a Cultural Heritage Evaluation Report (CHER) or Heritage Impact Assessment (HIA) is necessary.

Further guidance on identifying, evaluating, and assessing impact to built heritage resources and cultural heritage landscapes is provided in the *Ontario Heritage Tool Kit* series. Of these, *Heritage Resources in the Land Use Planning Process* (MHSTCI 2006) provides an outline for the contents of an HIA, which it defines as:

is a study to determine if any cultural heritage resources (including those previously identified and those found as part of the site assessment) ...are impacted by a specific proposed development or site alteration. It can also demonstrate how the cultural heritage resource will be conserved in the context of redevelopment or site alteration. Mitigative or avoidance measures or alternative development or site alteration approaches may be recommended.

Heritage Resources in the Land Use Planning Process also provides advice on how to organize the sections of an HIA, although municipalities may draft their own terms of reference. For example, the City of Ottawa has prepared *A guide to preparing cultural heritage impact statements* (see Section 3.4.2).

Determining the optimal conservation strategy where an impact is identified is further guided by the MHSTCI *Eight Guiding Principles in the Conservation of Historic Properties* (2007):

- 1) **Documentary evidence** – restoration should not be based on conjecture
- 2) **Original location** – do not move buildings unless there is no other means to save them since any change in site diminishes heritage value considerably
- 3) **Historic material** – follow “minimal intervention” and repair or conserve building materials rather than replace them
- 4) **Original fabric** – repair with like materials
- 5) **Building history** – do not destroy later additions to reproduce a single period
- 6) **Reversibility** – any alterations should be reversible

- 7) **Legibility** – new work should be distinguishable from old
- 8) **Maintenance** – historic places should be continually maintained

The *Ontario Heritage Tool Kit* partially, but not entirely, supersedes earlier MHSTCI advice that was produced primarily for environmental assessments (EAs) but that still provides relevant guidance for non-EA projects. Criteria to identify cultural landscapes is provided in greater detail in the *Guidelines on the Man-Made Heritage Component of Environmental Assessments* (1980:7), while recording and documentation procedures are outlined in the *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (1992:3-7).

3.4 City of Ottawa Heritage Policies & Guidance

3.4.1 Official Plan

The City of Ottawa's *Official Plan* was adopted by Council in 2003 and subject to comprehensive review and appeals in 2013 and 2016. Following these reviews, the City developed a *New Official Plan* compiled in draft in November 2020 and scheduled to be voted on by council in the fall of 2021. As the *New Official Plan* has not yet been finalized and adopted by council, only the policies of the 2003 *Official Plan* are discussed below. The *Official Plan* is a legal document that addresses matters of provincial interest defined by the *Planning Act* and Provincial Policy Statement as well as provides a policy framework to guide the City of Ottawa's physical development to the year 2036.

In Section 1.3 of the *Official Plan*, cultural heritage resources are understood as important to community vitality, local culture and provide citizens with a sense of who they are, and in Section 2.1 states that cultural heritage resources are to be valued and protected during the process of change.

Section 2.5.5 outlines the general policies regarding cultural heritage resources and in the context of strategic directions for building livable communities. This section describes heritage as a crucial aspect of the City's planning and infrastructure, and recognizes its non-renewable nature making the City of Ottawa a steward for these resources. The section further outlines 26 policies in support of the goal to identify and conserve cultural heritage resources, which include built heritage resources (Buildings, structures, sites), Cultural heritage landscapes, and Archaeological resources (Section 2.5.5.1).

Section 3.4 provides guidance on the Central Experimental Farm and acknowledges it as a National Historic Site and cultural landscape of national historic significance and local significant heritage value that contributes to Ottawa's distinct identity. All development proposals or public works in or adjacent to the CEF are required to prepare a cultural heritage impact statement as described in Section 4.6.1. Reference to the Commemorative Integrity Statement prepared by Parks Canada will ensure that the proposed development does not compromise the characteristics that represent and contribute to the CEF heritage value. It was amended in 2018 to allow the Historic Site to accommodate part of the future campus of the Ottawa Hospital. This involved re-designating a portion of the Site from Agricultural Research Area to General Urban Area and adding the Hospital Area to the Preston-Carling District Secondary Plan. The Plan permits the hospital use and its ancillary uses.

Section 4.6 outlines types of cultural heritage resources and the requirements for heritage studies as part of development applications and identifies the following cultural heritage resource types:

- Heritage Buildings and Areas (Section 4.6.1)
- Archaeological Resources (Section 4.6.2)
- River and Canal Corridors (Section 4.6.3)

- Scenic-Entry Routes (Section 4.6.4)
- Multi-Use Pathways (Section 4.6.5).

Cultural Heritage Impact Statements may be required when a development has the potential to adversely affect any designated heritage resource (Section 4.6.1) and when projects are along the Rideau River or Canal (Section 4.6.3). Planning applications for projects adjacent to, or across the street, from a heritage resource need to demonstrate that the proposal is compatible with the heritage resource (Section 4.6.1). Heritage resources are defined in Section 4.6.1 as:

- Buildings, structures, sites, landscapes, areas or environments which may have cultural, architectural, historical, contextual and/or natural interest, and which may warrant designation under the *Ontario Heritage Act*, and/or may warrant other means of cultural heritage recognition, for example, by the federal government. Heritage significance does not only flow from recognition but is dependent on a property's inherent values.

The Ottawa River, Rideau River, and Rideau Canal are identified under River and Canal Corridors and the City commits to ensuring that the shorelines remain accessible, and the river landscapes are maintained and improved in terms of their cultural heritage, scenic quality, and recreation and economic benefits (Section 4.6.3). The City reviews development applications adjacent to these rivers and the Rideau Canal to ensure that the visual quality of the waterway and views from the waterway, as well as any natural and cultural features are evaluated.

Scenic-Entry Routes, which include Prince of Wales Drive (Schedule I), have heritage destinations and often follow historic routes. They are intended to create a favourable first impression of Ottawa. Guidelines for scenic-entry routes promote the protection of views to cultural heritage features outside of the road right-of-way (S. 4.6.4 [2c]). Multi-use pathways provide connections between cultural heritage features (S.4.6.5).

The *Official Plan* also contains policies relating to urban design including objectives to:

- Enhance the sense of community by creating and maintaining places with their own distinct identity; and,
- Ensuring that new development respects the character of existing areas.

3.4.2 Terms of Reference for Cultural Heritage Impact Statements

The City of Ottawa developed *A guide to preparing cultural heritage impact statements* to identify when a CHIS is required and its format. In general, a CHIS is required to evaluate the impact of a proposed intervention (alteration, addition, partial demolition, demolition relocation or new construction) on cultural heritage resources when that intervention has the potential to:

- Adversely impact the cultural heritage value of properties designated under Part IV of the *OHA*;
- Adversely impact the cultural heritage value of districts designated under Part V of the *OHA*.

In addition, a CHIS may also be required for:

- Development application adjacent to or within 35 m of, designated buildings and areas;

- Development application adjacent to the Rideau Canal, the Central Experimental Farm, a national historic site (NHSC), a federally designated building (FHBRO), a building with a heritage easement, or a building on the heritage register.

There is also guidance on the content requirements for a CHIS. These include describing the positive and adverse impacts on the heritage resource or HCD that may result from a proposed development, describing the actions that may be required to prevent, minimize or mitigate the adverse impacts, and finally, demonstrating that the proposed development will not adversely impact the cultural heritage value of the property, HCD, and/or its streetscape/ neighbourhood. The suggested format has been followed for this CHIS.

Selected terms are also defined in the *A guide to preparing cultural heritage impact statements* and differ from those in the PPS 2020 and *Official Plan*:

- **Adjacent:** For the purposes of this document, adjacent means contiguous to.
- **Adversely impact:** A project has the potential to "adversely impact" the cultural heritage value of a project if it; requires the removal of heritage attributes, requires the destruction of a cultural heritage resource, obscures heritage attributes, is constructed in such a way that it does not respect the defined cultural heritage value of a resource.
- **Built Heritage:** Includes buildings, structures and sites that contribute to an understanding of our heritage and are valued for their representation of that heritage. They may reveal architectural, cultural, or socio-political patterns of our history or may be associated with specific events or people who have shaped that history. Examples include buildings, groups of buildings, dams and bridges.
- **Cultural Heritage Resources:** Includes four components: Built Heritage, Cultural Heritage Landscapes, Archaeological Resources, and documentary heritage left by people.
- **Cultural Heritage Landscape:** Any geographic area that has been modified, influenced, or given special cultural meaning by people and that provides the contextual and spatial information necessary to preserve and interpret the understanding of important historical settings and changes to past patterns of land use. Examples include a burial ground, historical garden or a larger landscape reflecting human intervention.

4.0 GEOGRAPHIC AND HISTORICAL CONTEXT

4.1 Geographic Context

The Site is a 20-hectare (ha) area within the City of Ottawa in eastern Ontario. It is on the border of limestone plains to the east, till plains to the west, and sand plains on the south, all within the Ottawa Valley Clay Plains physiographic region, an area of predominately “clay plains interrupted by ridges of rock or sand” with deep silty clays overlying limestone bedrock (Chapman and Putnam 1984:205). The topography of the wider area is relatively flat, rising slightly to the southwest.

Located approximately 2 km south of the Ottawa River and approximately 50 m west of Dow’s Lake on the Rideau Canal, the Site is within the Rideau Watershed and the Kemptville Ecodistrict of the Lake Simcoe-Rideau Ecoregion of the Mixedwood Plains Ecozone. Vegetation in this Ecodistrict includes deciduous species of sugar and red maple, beech, yellow and white birch, basswood, white ash, red and burr oak, and largetooth aspen, and coniferous species of eastern hemlock, eastern white pine, alder, willow, white and black spruce and balsam fir.

In relation to cultural boundaries, the Site is in the south-central portion of the City of Ottawa, approximately 3.3 km south of Parliament Hill, and within two municipal wards: the northeast portion of the Site is within Ward 17 (Capital) while the west portion is in Ward 16 (River). It is west of the Glebe neighbourhood, east of the Civic Hospital-Central Park neighbourhood, and south of the Centre Town West neighbourhood, and bound by the transportation routes of Carling Avenue on the north, Preston Street and Prince of Wales Drive on the east, and Maple Drive on the west. The Site is within the northeast portion of the Canadian Experimental Farm, which are federal lands administered by AAFC.

4.2 Historic Context

4.2.1 Regional Indigenous History

The Ottawa Valley was covered by the Laurentide ice sheet until approximately 11,000 years before present (BP). Following the period of deglaciation, this area was inundated by the Champlain Sea which is interpreted to have extended from the Rideau Lakes in the south, along the Ottawa Valley and St. Lawrence areas and terminating in the vicinity of Petawawa in the west. The exact western boundary is unconfirmed as current elevation levels reflect the isostatic adjustment of the land following the melting of the glaciers which has obscured definitive traces of the Champlain Sea shoreline at the time of its existence. The eastern portion of the sea extended into the Atlantic Ocean.

During the much of the Paleo Period (11,000–ca. 9,000 BP) Ottawa would have remained inundated by the Champlain Sea, although as the Champlain Sea receded towards the end of this period it is possible that people migrated along the changing waterfront landscape eventually moving into the Ottawa Valley (Watson 1999a).

The ridges and old shorelines of the Champlain Sea and early Ottawa River channels generally represent areas most likely to contain evidence of Paleo occupation in this region, however identifying the location and dates of these ancient shorelines has proved challenging. The boundaries of the Champlain Sea are not marked by a continuous identifiable shoreline, especially in its western shore where rocky conditions were not favorable to the formation of beaches (Chapman and Putman 1973). Attempts to use deposits of marine mollusk shells as a source for radiocarbon dates to delineate the transgression of the shorelines have proved unreliable as shells absorb carbon at different rates according to their depth below the surface and geological location (Robinson 2012). Additionally, earlier interpretations showing discrete stages of regression (see Chapman 1937) have proven not to be supported by the geological record. Unlike the catastrophic flood events during the Younger

Dryas climatic event that led to the rapid formation of the Champlain Sea, its regression was a slow process occurring as sea waters drained during isostatic rebound (Robinson 2012). The interpretation of the presence of shorelines is further complicated by the fact that isostatic rebound may have raised the Ottawa region above its current elevation before it receded to its current level (Fulton and Richards 1987). Flooding resulting from the overflow of glacial Lake Agassiz also eroded and manipulated topographic landforms within the evolving landscape (Fulton *et al.* 1987). Consequently, only the margins of the Champlain Sea at its maximum extent, a time when the Ottawa region would have been fully submerged, have been reliably mapped due to the rapid inundation creating pronounced shoreline features (Loring 1980). Although recent studies using various dating techniques that do not rely upon deposits of mollusk shells have provided some favourable results (Tremblay 2008), considerable work remains in developing the chronology of the Champlain Sea's regression.

The earliest possible settlement in the Ottawa Valley would have occurred during the recession of the Champlain Sea when the vegetation and wildlife began to develop within the area, which enabled the sustainability of humans (Watson 1999a). The ridges and old shorelines of the Champlain Sea and early Ottawa River channels reflect areas most likely to contain evidence of Paleo Period occupation in the region. Archaeological and geological investigations in the Ottawa Valley have suggested these early sites may be identified within the 550 foot (167.6 metres) or higher contour topography, although additional research may be required to confidently assess this correlation (Kennedy 1976).

Evidence of human occupation within the Ottawa Valley during this period has been documented by a variety of archaeological discoveries including fluted points (laurel leaf shaped points with a channel flake scar extending from the base of the point) recorded in the Rideau Lakes area (Watson 1982; 1999b). In Ottawa, sites interpreted to have produced Paleo Period material have been recorded near Greenbank Road (Swayze 2003), Albion Road and Rideau Road (Swayze 2004), although the lack of diagnostic material represented at these sites and the inferred climatic environment suggests these sites may rather be reflective of Archaic Period occupation following the recession of the Champlain Sea.

During the succeeding Archaic Period (ca. 9,000 to 2,800 BP), the environment of eastern Ontario approached modern conditions (Ellis *et al.* 1990). Occupation within the Ottawa Valley developed as the environment became habitable, with an Early Archaic Dovetail projectile point recovered in Ottawa South sometime around 1918-1920 (Pilon and Fox 2015) potentially representing the earliest diagnostic evidence of human interaction within the local landscape.

Archaic Period inhabitants generally continued to employ a hunter-gatherer subsistence strategy focused on localized faunal and floral resources including deer, fish, berries and nuts. The McIntyre Site, located on the north shore of Rice Lake and south of Peterborough, contained the remains of a large variety of floral and faunal species (Ellis *et al.* 1990). Plant remains recovered from the site included butternut, acorn, hickory, plum, cherry, blueberry and hawthorn. Faunal remains included deer, canine, beaver, muskrat, bear, and a large variety of fish including bass, bullheads, and suckers. The inhabitants of the site may also have been gathering wild rice (McAndrews 1984). In the Ottawa Valley, a stone fish weir likely dating to the Archaic Period found upstream from Morrison Island and Allumette Island demonstrates the increasingly sophisticated technology that was being employed during the period (Allen 2010).

The Ottawa Valley was an important route for the movement of copper, either through direct trade between individual groups, or through trips to Lake Superior to exploit the native copper deposits located there. Copper artifacts like those documented on Allumette Island in the Ottawa River have been discovered in Wisconsin,

Michigan, New York State and Manitoba (Kennedy 1970). This commodity, as well as other tradable goods, was presumably transported by canoes and other vessels along the navigable waterways including the Ottawa River.

The earliest evidence of human burials within the Ottawa Valley are interpreted to date to the Archaic Period (Pilon & Young 2009). Excavations at Allumette and Morrison Islands have found burial sites containing the remains of dozens of individuals within deposits that appear to have been used continuously for millennia (Kennedy 1966). The inclusion of grave offerings such as native copper pieces in burials found at the site of Coteau-du-Lac provides evidence for Archaic ritual practice (Pilon & Young 2009). Other sites with Archaic Period components within the Ottawa Valley region have been noted on Aylmer Island, Chaudière Falls, Wilber Lake, Leamy Lake, the Rideau Lakes (Watson 1982), Jessups Falls, and in Pendleton (Daechsel 1980). Archaic sites have been documented within the vicinity of the Rideau River (BhFw-19; BhFw-110, Golder 2017), and evidence from archaeological investigations around Honey Gables, Albion Road and Rideau Road may contain Early Archaic material (Swayze 2004). Evidence of Archaic Period occupation has also been recovered from isolated find spots within the City of Ottawa (Jamieson 1989), although the context of many of these have been poorly documented.

The Woodland Period (ca. 2,800 to 450 BP) is primarily distinguished from the Archaic Period by the introduction of ceramics (Wright 1972). Early Woodland Period inhabitants continued to live as hunters, gatherers and fishers in much the same way as earlier populations had done. They also shared an elaborate burial ceremonialism influenced by the inclusion of exotic artifacts within grave deposits (Spence *et al.* 1990, p. 129).

By the Middle Woodland Period (2,400 to 1,150 BP) regional cultural expressions or traditions have been distinguished by archaeologists. These traditions have been identified based on patterns of ceramic decorations, use of lithic materials, and are the primary basis to differentiate the Middle Period from the Early. A greater number of known sites from this period have allowed archaeologists to develop a better picture of the seasonal round followed to exploit a variety of resources within a home territory. Through the late fall and winter, small groups would occupy an inland “family” hunting area. In the spring, these dispersed families would congregate at specific lakeshore sites to fish, hunt in the surrounding forest, and socialize. This gathering would last through to the late summer when large quantities of food would be stored for the approaching winter.

Along the Ottawa River, Middle Woodland sites have been identified in the northwest end of Ottawa at Marshall's and Sawdust Bays (Daechsel 1980; Daechsel 1981), Rockcliffe Park (Pilon 2008; Pilon and Boswell 2015), as well as at Leamy Lake (Laliberte 1995), along the Rideau River (BhFw-6, BhFw-101, BhFw-110 and BhFw-118; Golder 2017; Patterson 2016) and within the City of Ottawa west of Bank Street (Golder 2014). Sawdust Bay 2 (BiGb-6), located approximately 750 m west of where the Mississippi River drains into the Ottawa, represents a camp site radiocarbon dated to 1560 BP (\pm 290 BP) and interpreted to reflect the Point Peninsula Tradition. The corresponding artifact assemblage shows that subsistence was focused on hunting fauna living in the adjacent lakes and swamps. The Leamy Lake and Rockcliffe Park Sites (BiFw-16 and BiFw-91), all located in the area around the mouth of the Gatineau River and the east shore of the Ottawa River, show evidence of seasonal warm weather settlement spanning a period from 4000 BP up to at least the Middle Woodland period (Pilon & Boswell 2015).

Another significant development of the Woodland Period was the introduction of agriculture and appearance of domesticated plants ca. 1,450 BP. Initially, only a minor addition to the diet, the cultivation of corn, beans, squash, sunflowers and tobacco gained economic importance during the Late Woodland Period. Unlike in southern Ontario, where the shift in subsistence resulted in the development of semi-permanent and permanent villages, evidence suggests that the Ottawa Valley remained occupied by mobile hunter-gatherers. In part, this was

because the terrain was less than suitable for early agriculture. It was also a reflection of the increased pressure on hunting territories and conflict over trade routes at the end of the Woodland Period.

By the end of the Late Woodland Period, distinct regional populations occupied specific areas of Southern Ontario separated by vast stretches of largely unoccupied land, including the Huron along the north shore of Lake Ontario, and the St. Lawrence Iroquois along the St. Lawrence River. Facing persistent hostilities with Iroquoian populations based in what is now New York State, the Huron moved from their traditional lands on the north shore of Lake Ontario to the Lake Simcoe and Georgian Bay region. The St. Lawrence Iroquois disappeared sometime in the late 16th century with refugees possibly dispersing among the Algonquin populations in the Ottawa Valley region (Pendergast 1999).

The Algonquins, who occupied the lands north of the Huron, had historical hunting territories that may have extended as far east as the St. Maurice River in Quebec. They also claimed the lowlands south of the St. Lawrence River after the disappearance of the St. Lawrence Iroquois in the late 16th century (Trigger & Day 1994). At the time of initial contact, the French documented several Algonquin groups residing in the vicinity of the present location of the City of Ottawa (Heidenreich & Wright 1987, Plate 18). These included the Kichesipirini of Morrison Island, the Matouweskarini along the Madawaska River to the west, the Onontcharonon in the Gananoque River basin to the southwest, and the Weskarini, the largest of the three, situated in the Petite Nation River basin to the northeast.

Late Woodland sites have been recorded throughout the Ottawa Valley. Two small Late Woodland sites were identified on a property near the Village of Cumberland (Ferris 2002). A significant Woodland Period occupation has also been identified at the Leamy Lake site and several burials dating to the Archaic Period have also been documented on the north side of the Ottawa River, just east of the Chaudière Falls. Many of these burials were observed during the mid-19th century, with upwards of twenty individuals documented along the northern shore of the Ottawa River between the Chaudière Falls and the Gatineau River. Many of these internments were associated with red ochre deposits, although there does not appear to be a consistent deposition positional pattern to those recorded (Pilon and Boswell 2015).

Though it is often difficult to link archaeological sites to specific historical Indigenous groups, the Highland Lake site (BiGh-1), located west of Ottawa, may be an Algonquin site associated with the Matouweskarini (von Gernet 1992). Ottawa Valley Algonquin sites typically consist of shallow deposits characteristic of seasonal occupation by small family groups within family or band territorial limits and are typically located on the headwaters of major tributaries (Pendergast 1999). Exceptions include several summer camps identified at Morrison Island and Leamy Lake where larger groups came together (Pilon & Boswell 2015).

The Algonquins' location along the same river networks used for transportation by early French traders positioned them to monopolize the early fur trade with the two communities becoming close allies following Champlain's expedition in 1603. Competition for furs increased existing tensions between the Algonquin communities and their neighbours including the Haudenosaunee Nations, such as the Mohawk, residing to the south in what is now Ontario and New York. The 17th century saw a long period of conflict known as the Beaver Wars between the Algonquin and the Haudenosaunee that resulted in the significant disruption of life. Mohawk raids against Algonquin Villages in the Upper Ottawa and St. Lawrence Valleys resulted in the abandonment or destruction of many Algonquin villages in these areas (Trigger and Day 1994). Some Algonquin's found refuge in French settlements such as Trois Rivières, Quebec City, Sillery, and Montreal while others may have retreated to interior locations along the Ottawa River's tributaries (Holmes 1993). At the end of the 17th century, the Haudenosaunee were driven out of much of southern Ontario by the Mississaugas though they continued to occupy parts of eastern Ontario on a seasonal basis.

The French brokered a peace treaty in 1701 at Montreal where the Algonquin, the French, and the Haudenosaunee agreed to peacefully share the lands around the Great Lakes (INAC 2011). In exchange for peace, the Algonquin gave the Haudenosaunee secure access to furs which the Haudenosaunee used to secure their alliance with the British. Between 1712-1716, Algonquins were noted as living along the Gatineau River with the Haudenosaunee occupation located south of the St. Lawrence (Holmes 1993). By 1740, Algonquin communities were present in the vicinity of Trois-Rivieres, Riviere Lievre and Lake of Two Mountains and Mohawk community members were residing near Lake of Two Mountains (Holmes 1993).

Following the Seven Years' War in the mid-18th century, the defeat of the French, Algonquin, and their allies by the British and the Haudenosaunee resulted in the further loss of Algonquin hunting territories in Southern Quebec and Eastern Ontario as the British seized France's colonies. The extension of Quebec's boundaries in 1774 through the Quebec Act and the use of the Ottawa River as the boundary of Upper and Lower Canada following the 1791 Constitution Act separated the Algonquins between two government administrations (AOP n.d.).

Britain's colonial policy differed from the French in that the Crown was much more interested in securing land surrenders from the Indigenous populations for settlement by Europeans. The Royal Proclamation of 1763 issued by King George III enabled the Crown to monopolize the purchase of Indigenous lands west of Quebec. Although the proclamation recognized Indigenous rights to their land and hunting grounds, it also provided a way through which these rights could be taken away (Surtees 1994). Land cession agreements between Indigenous groups and the Crown increased following the War of 1812 as a new wave of settlers arrived in Upper Canada primarily from Britain. The Crown implemented annuity systems in the purchase of lands from Indigenous peoples where the interest payments of settlers on the land would cover the cost of the annuity rather than pay a one-time lump sum. By the 1850s, Indigenous groups had become cautious of these agreements and had begun to demand the retention of reserved land and preservation of hunting and fishing rights (Surtees 1994).

In 1819, the Algonquin were left out of talks between the Crown and the Mississauga of the Bay of Quinte and Kingston areas for the sale of lands that included a portion of Algonquin territory in the Ottawa Valley (Surtees 1994). Captain William Redford Crawford, who enjoyed the trust of the Mississauga chiefs living in the Bay of Quinte region, negotiated on behalf of the British government who erroneously believed the Mississauga to be the only Indigenous peoples living in the region. In the so-called "Crawford Purchase," the Mississauga were pressed into giving up Aboriginal title to most of Eastern Ontario, including what would become the Counties of Stormont, Dundas, Glengarry, Prescott, Russell, Leeds, Grenville and Prince Edward, as well as the front Townships of Frontenac, Lennox, Addington and Hastings and much of what is now the City of Ottawa (including the Geographic Townships of Gloucester, Nepean, Osgoode, Marlborough and North Gower). The Algonquins were never consulted and never ceded their lands. Similarly, Algonquin petitions following the Rideau Purchase of 1819/1822 between the Mississauga and the Crown were largely ignored (Holmes 1993).

In 1839, the Crown denied the Algonquins and Nipissings the right to lease portions of their land, including islands in the Ottawa River, to settlers with whom they had previously been collecting rent payments (Holmes 1993). Furthermore, the Crown did little to prevent further additional encroachments by settlers on Indigenous lands.

A reserve was purchased for use by the Algonquins in Golden Lake in 1873 (Holmes 1993). The Golden Lake reserve, now known as the Algonquins of Pikwakanagan First Nation, has a registered population of around 2,000 people with over 400 living on the reserve (INAC 2013). Additional reserves and settlements for the Algonquins were established in Quebec during the mid-20th century.

The Indian Act of 1876 framed the relationship between the Canadian government and Canada's Indigenous peoples as a paternalistic one where the government served as their guardian until their cultures were able to integrate into Canadian society (INAC 2011). The Department of Indian Affairs was granted the authority to make

policy decisions such as determine who was classified as Indigenous, manage their lands, resources and money, and promote “civilization”. The consequence was the further erosion of Indigenous rights to autonomy and self-governance. The implementation of residential schools and adoption of Algonquin children by non-Indigenous families in the mid-20th century reflected further discrimination and the disregard of rights (AOP n.d.).

The Algonquins of Ontario today consists of ten communities: Antoine, Algonquins of Pikwakanagan First Nation, Bonnechere, Greater Golden Lake, Kijicho Manito Madaouskarini, Mattawa/North Bay, Ottawa, Shabot Obaadjiwan, Snimikobi, and Whitney and Area (AOO n.d.).

The Ottawa Valley is unceded Algonquin land and land claim negotiations with Canada and Ontario are in progress. The Algonquins and the Government of Canada signed an agreement in principle to transfer 117,500 acres of Crown lands in eastern Ontario to the Algonquins (INAC 2016; Tasker 2016). While this represents an important step in the negotiations, the talks are ongoing.

4.2.2 Post-Contact Regional History

Samuel de Champlain was the first European to document his explorations of the Ottawa Valley, initially in 1613 and again in 1615. He was preceded by two of his emissaries, Etienne Brule around 1610 and Nicholas de Vigneau in 1611. It is likely that all three travelled at least the lower reaches of the Rideau River. In the wake of Champlain’s voyages, the Ottawa River became the principal route for explorers, missionaries and fur traders travelling from the St. Lawrence to the interior, and throughout the 17th and 18th centuries this route remained an important link in the French fur trade.

Commonly acknowledged as the first permanent European resident in the area, Philemon Wright settled in Hull Township with five families and 33 men in 1800 (Bond 1984). This community grew over the next few years along the north shore of the Ottawa River and by 1805 Wright had begun significant lumbering activity in the area. Settlement of the south shore was very slow through the early 19th century. In 1809 another American, Jehiel Collins, erected a store at what was to become known as Bellows and later Richmond Landing. The first settler in the area was Ira Honeywell, who, in 1810, constructed a cabin west of the Chaudiere Rapids (Bond 1984). Another early settler was Braddish Billings, who established a small cabin in Gloucester Township in 1812. Billings went into the lumbering business with Philemon Wright and developed his homestead into a large family estate along the banks of the Rideau River.

The construction of the Rideau Canal (1827–1832) provided the new settlement of Bytown with its first major growth in population. This resulted in the development of two areas: Lower Bytown to the east of the Canal primarily populated by French Canadian and Irish labourers and merchants, and Upper Bytown to the west with a predominantly white Anglo-Saxon Protestant population. Bytown was incorporated as the City of Ottawa on January 1, 1855, with a population of 10,000. The selection of Ottawa as the capital of Canada in 1857 was the major catalyst in the subsequent development of the city.

By the late 18th century, John Graves Simcoe, Lieutenant Governor of Upper Canada, had issued a proclamation aimed at attracting new settlers to the Ottawa Valley. To help facilitate the influx of expected immigration to the area individual lots were surveyed within each township boundary and many of these settlement lots were granted by the Crown to United Empire Loyalists and other prospective immigrants.

4.2.3 Nepean Township

Two years after the 1791 division of the Province of Quebec into Upper and Lower Canada, the initial survey of Township “D” was undertaken by John Stegman, Deputy Surveyor for the Province of Upper Canada. This survey

was completed under the initiative instituted by John Graves Simcoe, Lieutenant Governor of the Province of Upper Canada, associated with his proclamation aimed at attracting new settlers to the region. Under a statute passed by the second Parliament of Upper Canada in 1798, Township “D” was officially re-named the Township of Nepean (Walker and Walker 1975).

A significant number of township lots were granted to military veterans, United Empire (U.E.) Loyalists and their children prior to 1800 in an effort to distribute the land to British loyalist families, although few U.E. Loyalists chose to travel to Nepean and preferred to settle along the St. Lawrence River (Belden 1879).

John Stegman’s survey of Nepean Township was initiated in anticipation of 143 settlers arriving in the area lead by George Hamilton, an Irish veteran of the Revolutionary War (Elliott 1991). Unfortunately, though, this first wave of settlers never materialized, and the government revoked Hamilton’s grant soon after. Those few who did eventually arrive to Nepean found the land to be without any roads and so remote from any settlement that they quickly left the area. By the early 1800s, the original Loyalist settler’s children were coming of age and began to claim their inherited property grants. Between 1800 and 1812, Loyalist heirs received 200 grants in Nepean and another portion of the township was set aside for crown and clergy reserves (Elliott 1991). The land grants did not immediately encourage settlement as many of the grant holders continued to reside along the St. Lawrence and Lake Ontario waterfronts holding their lands in Nepean as investment properties. As such, these properties were the object of speculation and many of the grants were consolidated into the hands a few families. Among the largest landowners in Nepean during this period were the Fraser family who held 40 lots along the Rideau River, including much of what was later to become Ottawa, by acquiring land through their Loyalist rights and then increasing their holdings with speculative purchases (Elliott 1991).

Another early settler to Nepean Township was Ira Honeywell who received the title for Lot 26, Concession 1 (Ottawa River) from his father. Leaving his wife and young family in Prescott, Honeywell arrived at his plot along the Ottawa River in November 1810 and proceeded to clear four acres of timber and construct a log cabin on the river front, which represented the first log home constructed in Nepean Township. In February 1811, Ira’s family traveled from Prescott to join him in Nepean with a second log cabin being built that year about half a mile inland from the river to provide privacy from those accessing the area along the Ottawa River (Walker and Walker 1975; Belden 1879).

Despite the numerous land grants, Nepean remained largely an undeveloped wilderness until the end of the War of 1812. Following the war, a depression in Great Britain coupled with the lack of enthusiasm displayed during the war by the loyalists to take up arms to defend British North America from their neighbours to the south lead the Colonial Office to disband some units of the army in the colony. The Richmond military settlement in Goulbourn Township was founded under this directive, with a road being cut through Nepean Township from the Ottawa River in the area now called Lebreton Flats to the new village site of Richmond on the Jock River soon afterwards (Elliott 1991). This transportation route, known today as Richmond Road, is the oldest thoroughfare in Ottawa (Woods Jr 1980) and became Bytown’s first road into the hinterland (Taylor 1986). It was along Richmond Road that ten of Nepean’s forty early resident families operated taverns which catered to those traveling from rural farmsteads to sell their goods at the markets in Bytown (Elliott 1991).

In 1833, Goulbourn Road, known today as Robertson Road, was constructed with a legislative grant though Bell’s Corners and that same year a forced Road (Jockvale Road/Bren Maur Road) was built from Richmond Road through to Chapman’s Mill and onto the Rideau River. A somewhat dispersed community developed around Chapman’s Mill, spreading along the forced Road, which eventually became known as Jockvale (Elliott 1991).

The construction of the Rideau Canal (1826 - 1832) accelerated settlement in Nepean Township and brought a large population of labourers to the area which necessitated infrastructure improvements as new roads were cut to facilitate construction activities. Bytown continued to develop at the junction of the Rideau Canal and the Ottawa River, with the influx of labourers increasing the population of the township from 580 in 1827 to 2,758 just a year later. Many of the new arrivals to Nepean Township were transient and left the area following the completion of the canal, although some stayed and established homesteads in the area. By 1832, the population of Nepean was sustained at 940, with many of these residents settling within the burgeoning Bytown settlement (Elliott 1991).

The earliest known township meeting in Nepean was held in January 1836 in J.R. Stanley's tavern, with a second commissioned a month later at Silas Burpee's tavern "by reason of Stanley's tavern having burned down" (Walker and Walker 1975). The tradition of convening township meetings in local taverns continued through the 1840s with Hugh Bell's establishment the primary host (Walker and Walker 1975) until 1845 when they were moved to Woods tavern on Richmond Road (Belden 1879).

Between 1851 and 1878, the population of Nepean Township expanded from 3,800 to 6,510 (Belden 1879), with a number of small communities developing including Jockvale, Britannia Heights, Westboro, Hintonburg, Rochesterville and Bell's Corners (Walker and Walker 1975).

The majority of Carleton County, including Nepean Township, was devastated during the fire which occurred in August 1870. Along Richmond Road alone, there were over 2,000 people left homeless, with many surviving the flames by seeking shelter in wells and root houses. As an aftermath of the Carleton County fire, plans were developed for the first waterworks system in the Capital. In 1875, the first tap water was delivered to Ottawa residents, as it had formerly been provided by door-to-door service by horse drawn puncheons taken directly from the Ottawa River (Walker and Walker 1975).

Beginning in 1889, and continuing through the mid-twentieth century, The City of Ottawa appropriated portions of Nepean, slicing 9,997.2 acres from the township territory by January 1, 1950, which left Nepean almost exclusively a rural municipality with a population of 2,500 residents. By 1967, Nepean had become the second fastest growing township with a population increase from 2,500 to 50,000 people (Walker and Walker 1975). In 2001, Nepean was officially amalgamated into the City of Ottawa.

4.2.4 The Rideau Canal

The Rideau Canal is a 202-km long slackwater canal, consisting of navigable lakes, rivers and excavated channels which connect Ottawa and Kingston on Lake Ontario (Parks Canada 2005:9). It is administered by Parks Canada and has 50 locks at 24 lock stations, 73 dams, and 19 km of excavated channels as well as defences in the form of fortified lockmaster's houses and blockhouses (Parks Canada 2005:9).

Though used in its history for commercial purposes and today as a recreational waterway, the Rideau Canal was originally conceived in the years immediately after the War of 1812 as a military communication linking Montreal and the Great Lakes, a route made secure by its distance inland from the vulnerable St. Lawrence River corridor shared with the United States. It was a critical element in Britain's larger strategy for the Canadas, which included building canals and fortifications in both Ontario and Quebec. In 1816, Lieutenant Joshua Jebb of the Corps of Royal Engineers was sent to survey the potential routes, and the route eventually selected was to follow the Ottawa River from Montreal to the mouth of Rideau River then travel south along Rideau through a series of small

lakes to the Cataraqui River. To account for the difference in elevation and create the consistent water levels, the route would require a series of locks between Ottawa and Kingston (Passfield 1982:15-17).

Construction began in 1826 under the direction of Royal Engineer Lieutenant-Colonel John By, who established his headquarters near the mouth of the Rideau River. The work was primarily contracted to private companies with most locks and dams built of stone quarried on-site and iron forged by local blacksmiths. The canal would take six years to build and when officially opened in the May 1832 had cost £822,804, far in excess of its original estimates yet not beyond what typically plagued canal projects in the early 19th century (Passfield 1982:24-34,177).

In the first years of its operation the Rideau Canal was a bustling commercial artery but when the St. Lawrence rapids were bypassed in 1849, commercial shippers chose this southern, more direct route between Montreal and the Great Lakes (Passfield 1982:181). Commercial use ended shortly after the First World War, but by the 1930s the canal assumed a new role as a route for pleasure craft, spurring hotels and private cottages to be built along the canal into the 1960s, and Parks Canada to assume operation of the canal in 1972 (Passfield 1982:182). Today the Rideau Canal is a major tourist attraction, including during the winter when the north “Skateway” section through Ottawa becomes “the world’s largest outdoor rink”.

4.2.5 The Central Experimental Farm

The Central Experimental Farm was established in 1886 as the central research station of the Experimental Farms Branch (EFB) of the Department of Agriculture (AAFC 2019). From 1886 to 1889, the EFB acquired the property and laid out the site, erected several buildings and planted the Arboretum, forest belts and the Vascular Plant Herbarium collection. The plan represented English landscape concepts and farmstead arrangements and ornamentation. Sir John Carling and Sir Charles Saunders played a pivotal role in the establishment of the farm, which ultimately led to the development of the 1886 *Act Respecting Experimental Stations*, which remains in force today. The *Act* provides details concerning the location, administration and general goals of the experimental stations.

The federal government purchased the property in 1886 by acquiring fifteen properties covering 465 acres (AAFC 2019). The farm was divided into three general areas: the main farm complex, experimental fields and the Arboretum. The main complex comprised of residences, office and farm structures. The landscape of the central area featured curvilinear road patterns, small gardens adjacent to residential structures, and a great lawn. Field crop and flower test plots were interspersed among the residences and farm buildings (Figure 4).

Originally the research work only had three divisions: entomology and botany, chemistry, and horticulture. By the early 20th century, the City of Ottawa had expanded westward into the Nepean Township and a street railway was extended into the CEF grounds. The site became more formal between 1890 and 1911, with tree-lined driveways and formal garden beds (AAFC 2019). Between 1912 and 1936, a number of original buildings were demolished; however, the number of buildings on the farm increased from 34 to 95 (AAFC 2019).

By the mid-1930s, a walled sunken garden was created on the site of the Horticulturist’s house, and the garden designed in the formal style of the period. In 1936, the Federal District Commission (now National Capital Commission) incorporated the farm in its proposed plan for a scenic driveway system which was implemented by the mid-1940s. This resulted in the loss of the forest belt along the north and west sides of the CEF property and dismantling of the main entry gates. The Saunders Building was opened in 1936 to house the research services.

Over the same period, the first national observatory in Canada was developing in the northeast portion of the CEF NHSC. The Dominion Observatory designed by David Ewart of Public Works' Chief Architect's Branch and opened in 1905 had the primary function to "determine and distribute time to government departments, including Parliament, as well as to other businesses that required precise time, most notably the railroads" and was oriented precisely along the East-West Line defined by Chief Astronomer Frederick King and his colleague Otto Klotz. King was later declared a person of National Historic Significance by the HSMBC. The Observatory and its scientists later established the national time signal, which continues to be well-known today in CBC Radio's regular announcement, "The beginning of the long dash, following 10 seconds of silence indicates exactly 1 o'clock Eastern Standard Time" (Odell 2020:15; Thomson 2020: pers. comm.; Brooks & Klatt 2005).

The Observatory's original main instrument, the 15-inch refracting telescope, was the largest of its kind ever installed in Canada, and the building became the primary reference point for anyone measuring time and geographical locations, latitudes and longitudes, and altitudes in Canada. From their base on the campus, NRCan scientists also made important advances in seismic, magnetic and gravimetric studies, the study of the sun and star systems, among many others (Brooks & Klatt 2005).

In the late 1950s and early 1960s some buildings in the Farm were demolished or replaced, and by 1960s the CEF was clearly divided into two areas: the research station complex in the south and west, and in the north the administrative complex formed by the Neatby Building, the Dominion Observatory Campus (Figure 5), and the headquarters for the AAFC in the 11-storey Sir John Carling Building with west and east annexes, built in 1967 (Figure 6). In the 1970s, several buildings no longer required for research purposes were removed from the site.

The cultural heritage significance of the CEF as a whole was first recognized in 1981, when the HSMBC recommended the "establishment of the Experimental Farms Branch (of Agriculture Canada)" as a National Historic Event of Canada (Parks Canada 1997:1267-1268). This was marked for the CEF's 100th anniversary in 1986 by a HSMBC plaque commemorating the CEF's role as the research headquarters of a network of experimental stations. The Friends of the Farm community interest group formed around this time and by the 1990s there was growing public interest in documenting the CEF's evolution (Figure 7) and designating it as a NHSC, which the HSMBC recommended in September 1997 (Bouse 1993; Parks Canada 1997:1267).

In 2009, the AAFC vacated the Sir John Carling Building, and in 2014 it was demolished with the East Annex through controlled implosion, leaving only the West Annex. This surviving building was then given a Recognized designation by FHBRO for its historical, architectural, and environmental values, with its historical value primarily linked to the "national theme of post-World War II expansion and consolidation of federal government services, specifically Canada's national program of agricultural research" as well as its association with the 1950 Gréber Plan for Ottawa's urban development that advocated for centralized federal government campuses in the National Capital Region. The architectural value of the West Annex was as a "very good example" reflecting the work of Ottawa-based architect Hart Massey for the Sir John Carling Building complex, his largest project, and the building's Modernist architecture in the International style.

The West Annex was suggested as a museum space in the *Central Experimental Farm National Historic Site Management Plan* and in 2013 was thoroughly documented by Heritage Conservation Services of Public Services and Procurement Canada (PCSP). However, in 2017 a "Best Efforts Report" determined the Annex could not be retained intact or adaptively re-used and recommended the Annex be demolished to make way for the New Civic Development (a conclusion re-affirmed in an "Updated Best Efforts Prior to Demolition" report [PCSP 2019] and the following year the TOH and designer HDR Inc. committed to incorporating elements of the Annex into the

Project, combined with “other commemorative opportunities” including naming, plaques, and exhibits (HDR 2018). Demolition of the Annex commenced in June 2021.

Historical mapping and aerial photographs chart the Site’s transition from surveyed lot during the second half of the 19th century, to experimental farm and observatory, and finally as the “headquarters zone” for the AAFC within the CEF NHSC (Figure 8 to Figure 10).

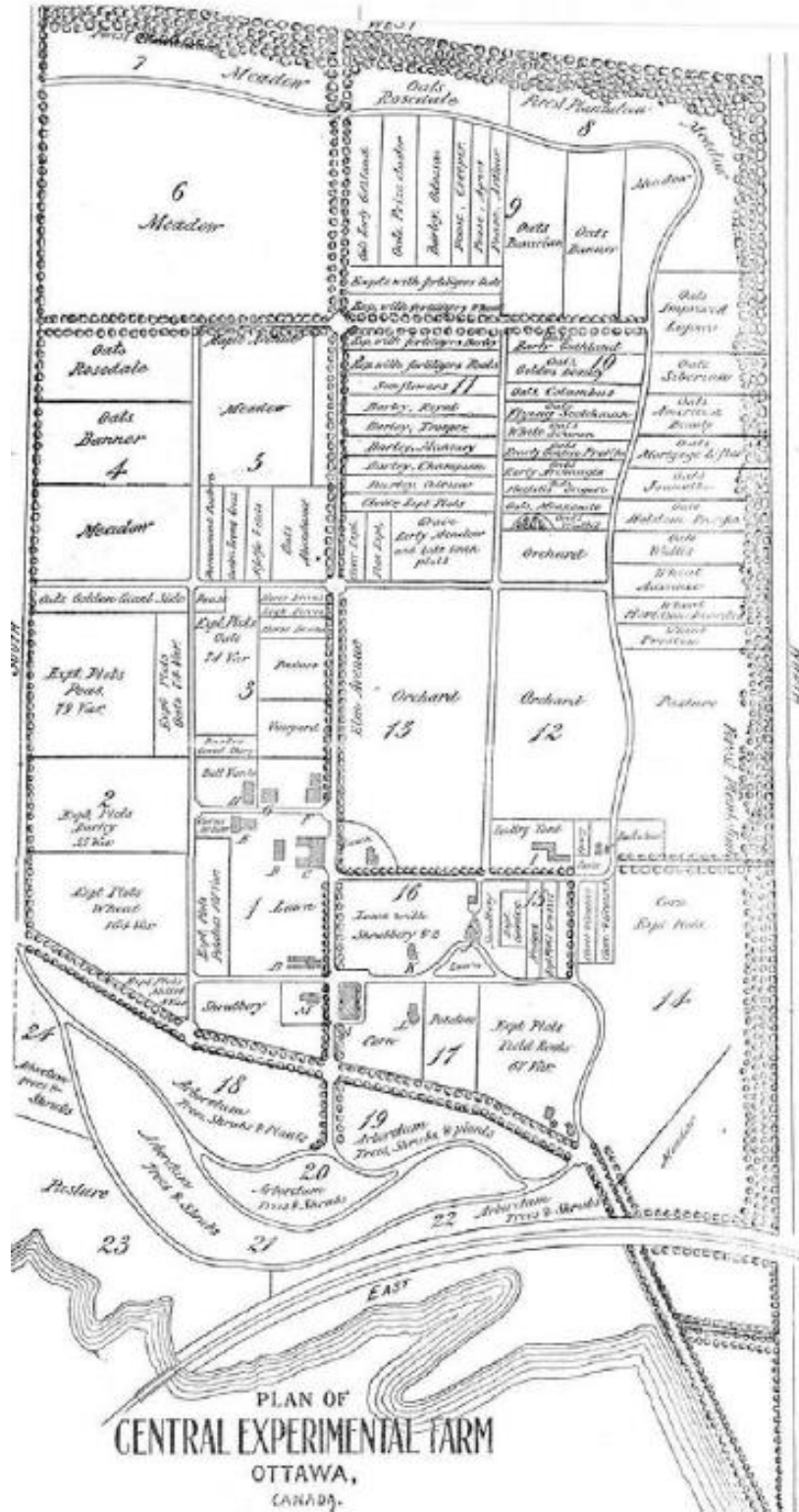


Figure 4: Plan of the Central Experimental Farm, 1897 (AAFC 2019)



Figure 5: The Dominion Observatory Campus in 1968 (Dominion Observatory Fonds, Box #2, Canadian Museum of Science and Technology Archives, reprinted in Odell 2020:19)



Figure 6: The Sir John Carling Building as seen from the east side of Dow's Lake, circa late 1997 (from Parks Canada 1997:1343)



Figure 7: David Bouse's drawing of the CEF Core Area, 1997 (AAFC 2019)

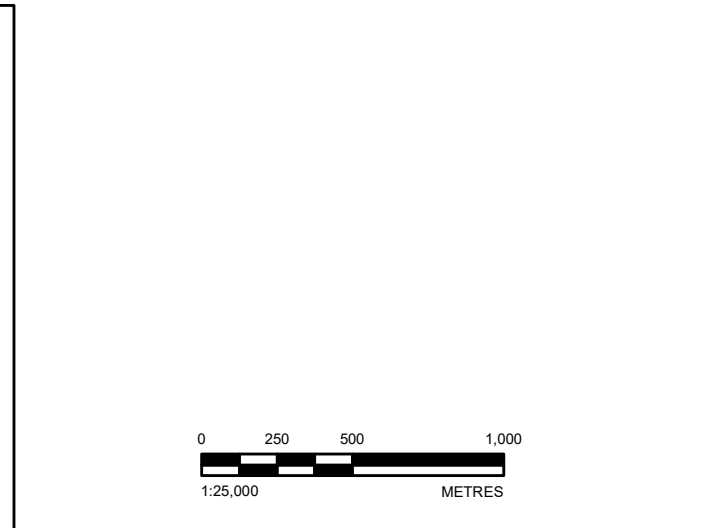


SCALE 1:125,000

LEGEND
 OTTAWA HOSPITAL NEW CAMPUS SITE STUDY AREA

NOTE(S)
 1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
 1. 1863 HISTORIC MAP
 2. 1879 HISTORIC MAP
 3. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
 4. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83
 COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28



CLIENT
 PARSONS INC.

PROJECT
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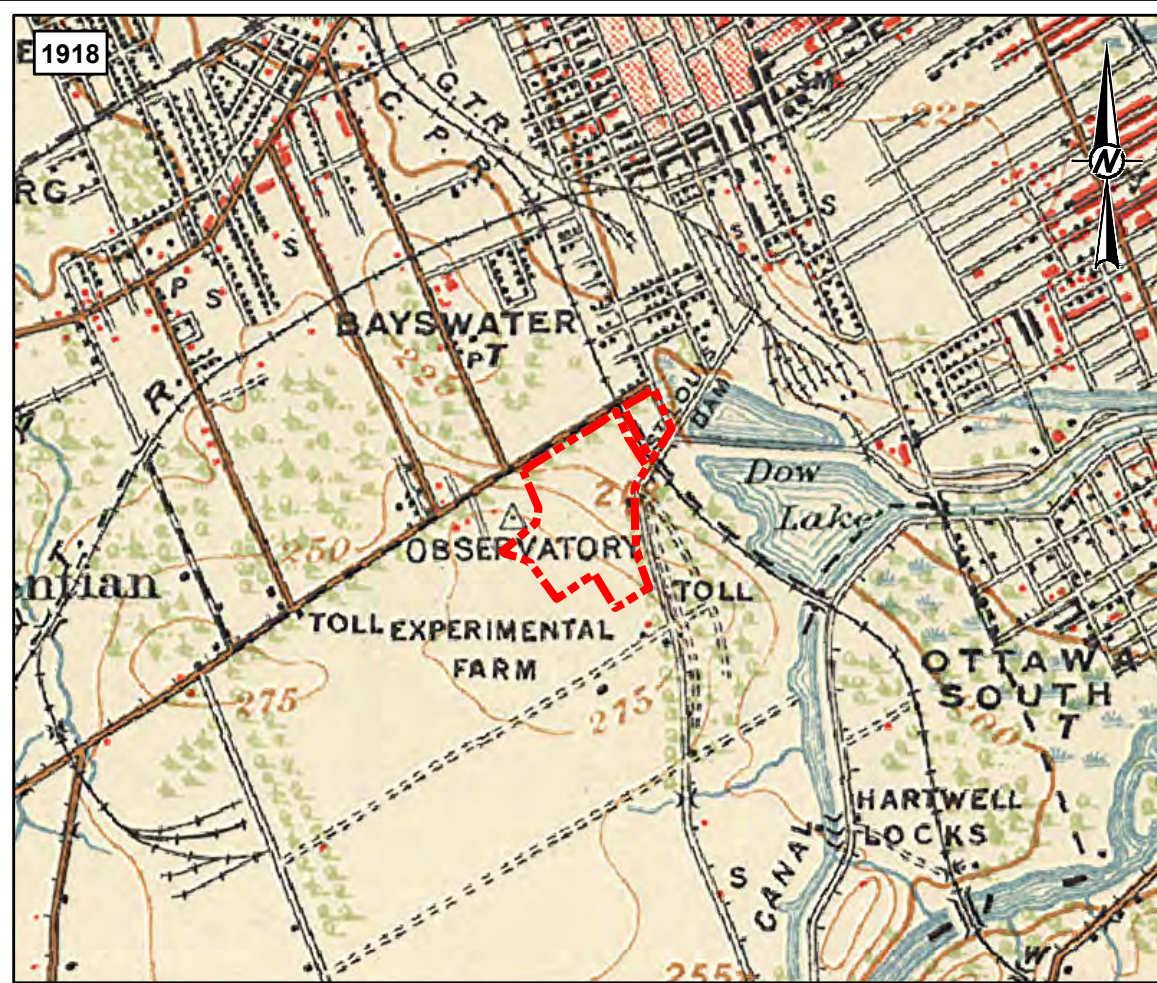
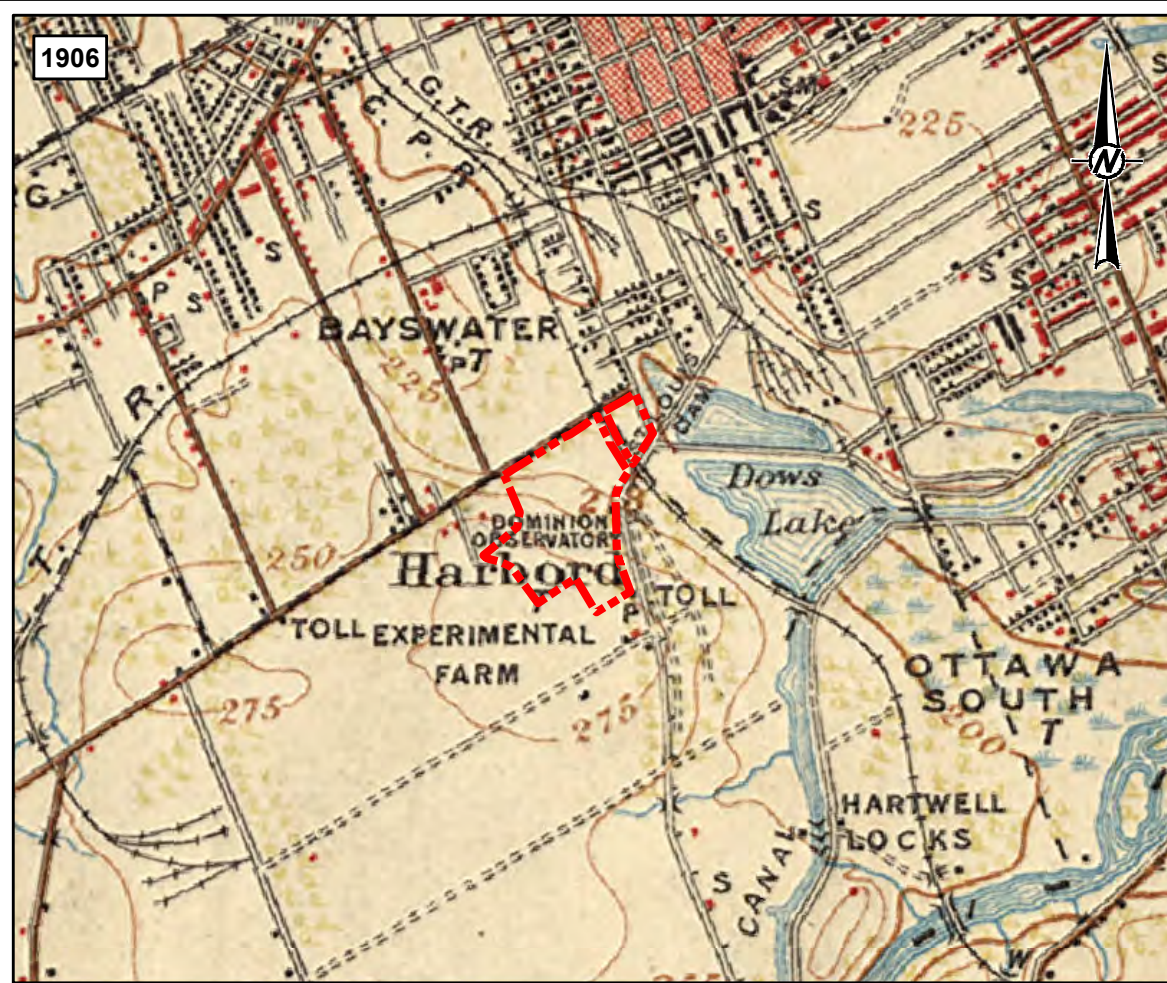
TITLE
 PROPERTY OVERLAID ON 19TH CENTURY HISTORICAL MAPS

CONSULTANT	DATE
GOLDER	7/19/2021
DESIGNED	AM
PREPARED	BR
REVIEWED	---
APPROVED	---

PROJECT NO. 19127064 CONTROL 0005 REV. A FIGURE 8

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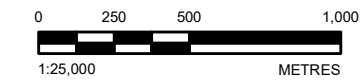


SCALE 1:125,000

LEGEND
 OTTAWA HOSPITAL NEW CAMPUS SITE STUDY AREA

NOTE(S)
 1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
 1. OTTAWA, ONTARIO. 1:63,360. MAP SHEET 031G05, [ED. 1], 1906
 2. OTTAWA, ONTARIO. 1:63,360. MAP SHEET 031G05, [ED. 4], 1918
 3. OTTAWA, ONTARIO. 1:63,360. MAP SHEET 031G05, [ED. 15], 1940
 4. OTTAWA, ONTARIO. 1:25,000. MAP SHEET 031G05G, ED. 3, 1971
 5. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
 6. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83
 COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28



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PROJECT
 CULTURAL HERITAGE IMPACT STATEMENT FOR THE NEW CIVIC DEVELOPMENT FOR THE OTTAWA HOSPITAL

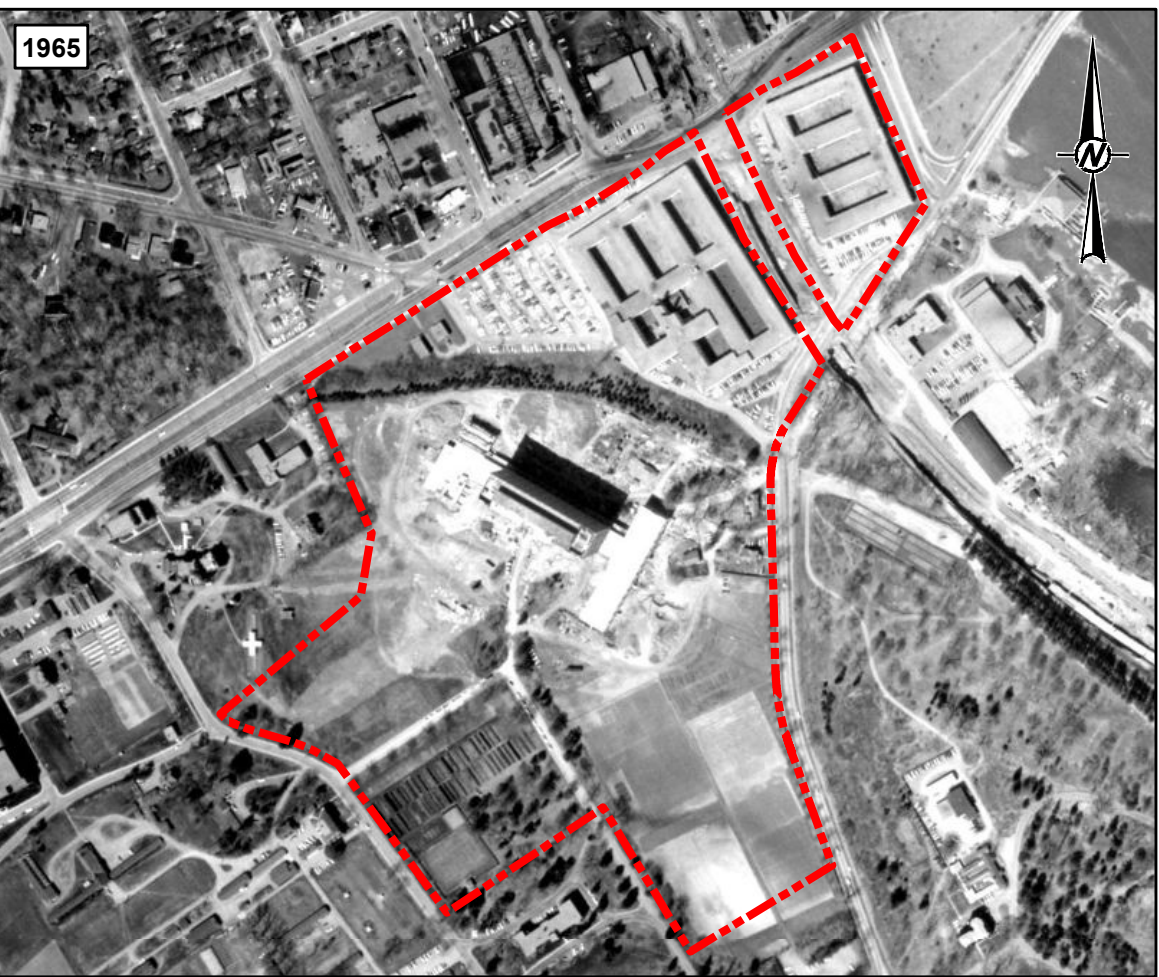
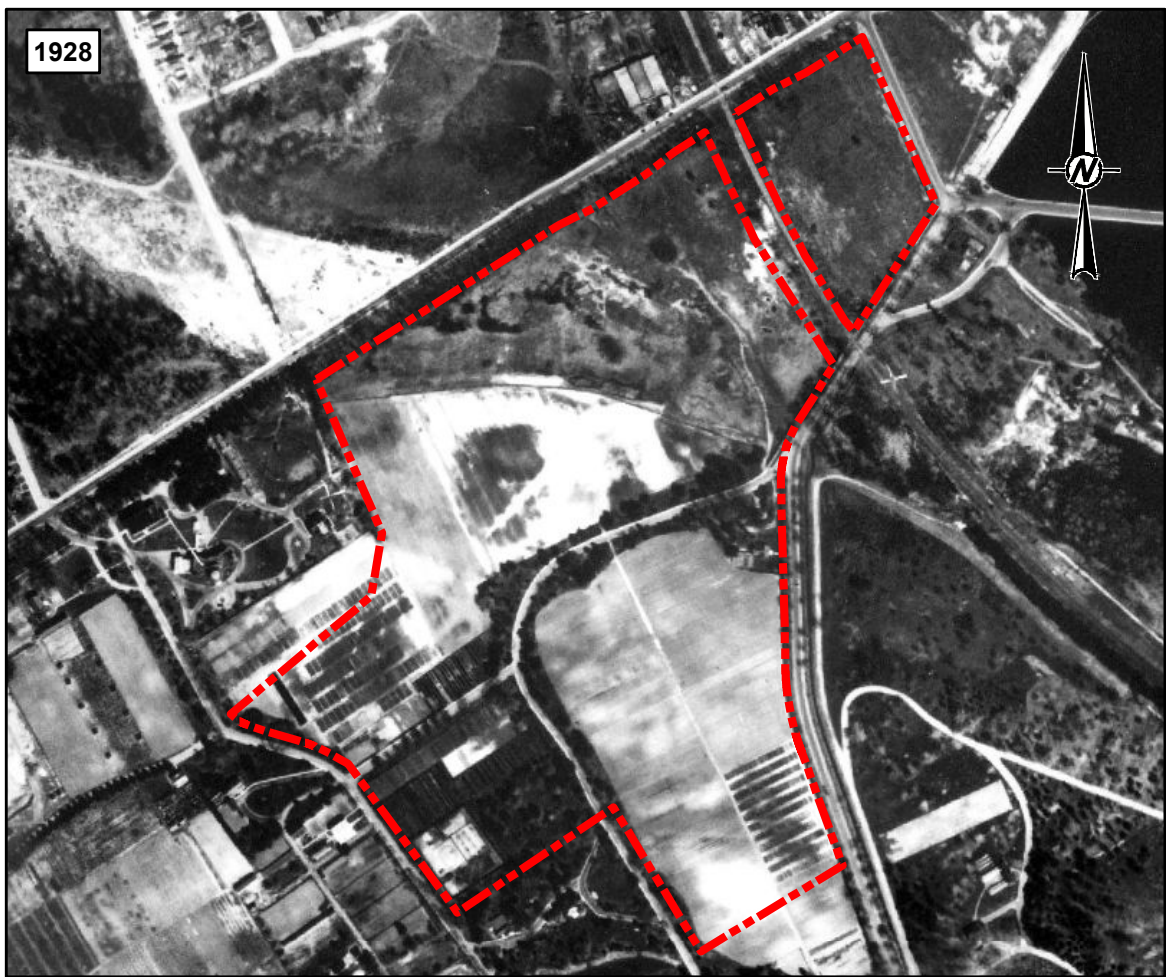
TITLE
PROPERTY OVERLAID ON 20TH CENTURY TOPOGRAPHIC MAPS

CONSULTANT	YYYY-MM-DD	7/19/2021
DESIGNED	AM	
PREPARED	BR	
REVIEWED	---	
APPROVED	---	

PROJECT NO. 19127064 CONTROL 0005 REV. A FIGURE 9

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 28mm



SCALE 1:125,000

LEGEND
 OTTAWA HOSPITAL NEW CAMPUS SITE STUDY AREA

NOTE(S)
 1. ALL LOCATIONS ARE APPROXIMATE


REFERENCE(S)
 1. AERIAL PHOTOGRAPHS (1928, 1965, 1991, 2015) FROM GEOOTTAWA, CITY OF OTTAWA.
 2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
 3. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28



CLIENT
 PARSONS INC.

PROJECT
 CULTURAL HERITAGE IMPACT STATEMENT FOR THE NEW CIVIC DEVELOPMENT FOR THE OTTAWA HOSPITAL

TITLE
 PROPERTY OVERLAID ON 20TH CENTURY AERIAL PHOTOGRAPHS

CONSULTANT	DATE
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	REVIEWED ---
	APPROVED ---

PROJECT NO. 19127064 CONTROL 0005 REV. A MAP 10

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5.0 CURRENT CONDITIONS

5.1 Setting

5.1.1 The Site

The Site's current setting can be characterized as institutional parkland (zoning is I2[2491-h]) within a larger urban residential and commercial context. Its topography is relatively flat with a gentle slope east toward Dow's Lake and is covered by maintained lawn with walking paths and dispersed semi-mature deciduous and coniferous trees (Figure 11 to Figure 13). A thick band of trees runs east-west through the Site from Carling Avenue to Prince of Wales Drive, while others mark the east boundary and both sides of the O-Train route. There are no water features within the Site.

Features within the Site are predominately clustered in the west. Located in the west-central portion, the Annex (Figure 14 and Figure 15, for architectural description see Section 6.1.4) is setback approximately 100 m south from Carling Avenue and is flanked on the north by a large parking lot with lane leading to the north terminus of Birch Avenue, while another lane south of the Annex extends east from Birch Drive. The two-lane (one in each direction) Birch Drive divides south of the Annex with the western section leading to Maple Drive and the east section travelling south to the National Capital Commission Scenic Driveway. South of Birch Drive and east of Maple Drive within the Site is an open area that includes several hedge rows and the courts and clubhouse of the DARA Tennis Club. In the east portion the Site is bisected by the O-Train line and between the line and Preston Street is another large parking lot that is entered from Prince of Wales Drive on the south. Apart from the surrounding roads and parking lots there are no clear boundary demarcations within the Site.

Views from and within the Site are highly varied based on location due to the amount of vegetation, but there are clear views of the Annex from the open area to its south and facing northeast from Birch Drive, and of the surrounding area to the north and south from the open area in the east portion of the Site. Views of the Site are also varied, with those recognized as significant discussed in Section 6.0.



Figure 11: View facing west from the centre of the Site



Figure 12: View facing northeast from the west centre portion of the Site



Figure 13: View facing south from the centre-north portion of the Site



Figure 14: View facing west of the Annex



Figure 15: View of the Annex facing north

5.1.2 Central Experimental Farm

The CEF NHSC covers approximately 400 hectares in an irregular shaped parcel bound by Fisher Avenue to the west, Rideau Canal and Dow's Lake to the east, Carling Avenue to the north and Baseline Road and Prince of Wales Drive to the south. Its topography is relatively flat with agricultural crop land to the west and south and agricultural buildings dispersed throughout. In its east-central "core" section are several Classified and Recognized Federal Heritage Buildings related to the AAFC operations, while in the northeast is the Dominion Observatory Complex (Figure 16) and surrounding Dominion Observatory Campus related to operation of National Resources Canada (NRCan). In the northeast is the "headquarters zone" that lies within the Site, while to the south and east are maintained lawns and treed areas that include Queen Juliana Park to the northeast, the Dominion Arboretum, Fletcher Wildlife Garden and Canadensis Botanic Garden. The National Capital Commission Scenic Driveway runs east-to-west through the middle of the farm and is lined with large deciduous canopy trees and multi-use trail on either side. A mix of deciduous and evergreen trees screen the property from Carling Avenue.

Within 150 m of the Site's boundaries and within the CEF NHSC are 13 Recognized or Classified Federal Heritage Buildings that are primarily clustered northwest of the Site in the Dominion Observatory Campus or south of the Site in the central core. Buildings in the Dominion Observatory Campus include, from east to west:

- Observatory House, Building No. 2
- Geophysical Laboratory Building, Building No. 3
- Machine Shop, Building No. 4

- Photo Equatorial Building, Building No. 9
- Dominion Observatory, Building No. 1
- South Azimuth Building, Building No. 8, and
- Seismology Survey Building, Building No. 7

A short distance south of the Dominion Observatory Campus is the Arc Biotech Building (Building No. 34, on the west side of Maple Drive), while further south is the:



- Main Greenhouse Range, Building No. 50
- William Saunders Building, Building No. 49
- Heritage House, Building No. 60
- Central Experimental Farm Nutrition Building, Building No. 59



Each of the buildings listed above are summarized with brief descriptions in Table 2.







Figure 16: The Dominion Observatory Complex facing north. From left, the South Azimuth Building (Building 8), the Dominion Observatory (Building 1), and the Photo Equatorial Building (Building 9)



Table 2: Central Experimental Farm Recognized or Classified Federal Heritage Building Adjacent to Site

Building no.	Description	Heritage Status	Distance to Site	Photograph
1	Dominion Observatory constructed 1902-04 in Romanesque Revival and Edwardian Classicist styles exhibiting stone masonry and retractable copper dome.	Classified Federal Heritage Building	Approximately 110 m west of northwest corner of Site	
2	Observatory House constructed 1909 in Queen Anne Revival and Classical Revival styles exhibiting brick masonry, stone foundation and wood shingle roof.	Recognized Federal Heritage Building	Approximately 35 m northwest of Site	

Building no.	Description	Heritage Status	Distance to Site	Photograph
3	Geophysical Laboratory constructed 1954-55 (1960 addition) in International style used for federal buildings during mid-1950s, exhibiting L-shaped flat-roof construction with asymmetrical massing.	Recognized Federal Heritage Building	Approximately 45 m northwest of Site	
4	Machine Shop constructed by 1917 (1940s and 1974 additions), exhibiting red brick construction with concrete foundation and limestone windowsills.	Recognized Federal Heritage Building	Approximately 15 m northwest of Site	

Building no.	Description	Heritage Status	Distance to Site	Photograph
7	Seismology Survey Building constructed 1913-14 in Edwardian Classical style exhibiting smooth brick masonry, rough limestone foundation and copper cornice.	Recognized Federal Heritage Building	Approximately 150 m west of the northwest corner of Site	
8	South Azimuth Building constructed 1912 as extension to Dominion Observatory, exhibiting Romanesque Revival and Edwardian Classicist styles with limestone base, sandstone walls and crenellated cornice.	Classified Federal Heritage Building	Approximately 72 m northwest of Site	

Building no.	Description	Heritage Status	Distance to Site	Photograph
9	Photo Equatorial Building constructed 1912-14 as extension to Dominion Observatory, exhibiting Romanesque Revival and Edwardian Classicist styles with limestone base, sandstone walls and retractable copper dome.	Classified Federal Heritage Building	Approximately 60 m northwest of north and west boundaries of Site	
34	Arc Biotech Building built 1920 (1950 addition) exhibiting red brick walls, painted wood trim, high concrete foundation and pitched roof dormers.	Recognized Federal Heritage Building	Approximately 24 m west of Site	

Building no.	Description	Heritage Status	Distance to Site	Photograph
49	William Saunders Building constructed 1935 in Collegiate Gothic style exhibiting monochromatic brick facing, stone detailing, buttresses and roof-top crenellation.	Recognized Federal Heritage Building	Approximately 56 m south of Site	
50	Main Greenhouse Range constructed 1915 (1923, 1930s, and 1960s additions) exhibiting gable-roofed greenhouses attached perpendicularly to L-shaped flat-roofed headerhouses.	Recognized Federal Heritage Building	Approximately 76 m southwest of Site	
59	Nutrition Building constructed 1898-1899 (1913, 1924, 1948 and 1950s additions) exhibiting smooth red brick masonry, limestone basement and steeply pitched roof.	Recognized Federal Heritage Building	Approximately 100 m south of Site	

Building no.	Description	Heritage Status	Distance to Site	Photograph
60	Heritage House constructed 1889 (1955 addition) in Queen Anne Revival style exhibiting wood clapboard siding, wood shingled roof, ornamental wood cladding and elaborate scroll work verandah.	Recognized Federal Heritage Building	Approximately 101 m south of Site	
74	Horticulture Building/ Botanical Laboratory constructed 1924 (1929 addition) in Queen Anne style exhibiting brick clad first storey, stuccoed second storey and coursed stone foundation.	Recognized Federal Heritage Building	Approximately 115 m southeast of southeast corner of Site	

5.1.3 Dow's Lake and Rideau Canal NHSC/WHS

The northwest corner of Dow's Lake is immediately east of the intersection of Preston Street and Carling Avenue that marks the northeast corner of the Site. On this border is the Dow's Lake Pavilion and marina, while the shoreline to the north is within Commissioners Park (Figure 17 and Figure 18). Vehicle access on the north and east of Dow's Lake continues to Prince of Wales Drive as the Queen Elizabeth Driveway, and is one lane in each direction. The tree-lined pedestrian and bike path, Rideau Canal Western Pathway, parallels the Queen Elizabeth Driveway on the east and north then turns south to follow the lake's west shoreline.

The Rideau Canal NHS/WHS includes two-thirds of Dow's Lake and turns south and east at the southern boundary of the lake (Figure 19). Approximately 760 m south of Dow's Lake and 1.3 km southeast of the Site is Hartwells Lockstation (Locks 9 & 10) while on the channel on the east side of Dow's Lake is the Bronson Avenue crossing. The Rideau Canal NHSC/WHS and its views are described further in Section 5.1.3.



Figure 17: View facing west of Dow's Lake and the Site



Figure 18: View facing northwest of Dow's Lake and the Site



Figure 19: View facing northwest from the Bronson Avenue Bridge of Dow's Lake and the Site

5.1.4 Prince of Wales Drive and Dominion Arboretum

Prince of Wales Drive is an approximately 30-km long road running between the community of North Gower in the south and Dow's Lake in the north, where it continues as the Queen Elizabeth Driveway. In the Nepean and Ottawa area, it runs along the Rideau Canal NHS/WHS and the stretch along the east boundary of the CEF NHS is one lane in each direction with a bike path and sidewalk on either side and an evergreen hedgerow on the west side and maintained lawn and deciduous trees to the east (Figure 20). This road is described further in Section 6.4.

Approximately 160 m south of the Site's south boundary Prince of Wales Drive intersects the National Capital Commission Scenic Driveway at a traffic circle, with the latter road continuing east to terminate in a broad loop at the Dominion Arboretum. Within this area, north of the National Capital Commission Scenic Driveway's east terminus and between Prince of Wales Drive and Dow's Lake, is the Central Experimental Farm Horticultural Building (Building No. 74) and Friends of the Central Experimental Farm building (Building No. 72) in the south and the Navy Curling Club and HMCS Carleton in the north.



Figure 20: View north along Prince of Wales Drive from the center-east portion of the Site

5.1.5 Carling Avenue and adjacent neighbourhoods

Carling Avenue is an approximately 18-km long road running east to west, commencing at Bronson Avenue and ending at the community of South March Station. The stretch along the Central Experimental Farm is three lanes of traffic in each direction, separated by a grass median. Sidewalks are on both sides of the road, which have no median separating the sidewalk from the road. There are no street trees with some mature vegetation on private property. The area north of the Site is predominately residential with some commercial and institutional land use, and directly to the north are several medium to high-rise apartment buildings with associated parking lots (Figure 21). Approximately 600 m to the west is the current TOH Campus at the corner of Carling Avenue and Melrose Avenue South.



Figure 21: View east on Carling Avenue from the centre-north portion of the Site

6.0 STATEMENTS OF SIGNIFICANCE

6.1 Central Experimental Farm NHSC

The CEF was designated a national historic site of Canada in 1997. Its SOS, as presented in the CRHP, is outlined in the following subsections.

6.1.1 Description of Historic Place

The Central Experimental Farm National Historic Site of Canada, located in urban Ottawa, Ontario, is comprised of various structures and buildings embedded within a large rural landscape. Flanked by broad expanses of farmland, its central area consists of the administrative core, housed in a variety of eclectic and picturesque structures, and encompasses an arboretum, specimen plantings, and intricate ornamental gardens. Official recognition refers to the cultural landscape with its natural, built, and landscaped components at the time of designation.

6.1.2 Heritage Value

The Central Experimental Farm was designated a national historic site of Canada because:

- as a cultural landscape, the more than 400-hectare farm in the heart of the Nation's Capital reflects the 19th-century philosophy of agriculture and carefully integrates an administrative core and a range of other buildings with arboretum, ornamental gardens, display beds and experimental fields in a picturesque composition;
- since its establishment in 1886, the farm has made significant scientific contributions to agriculture in Canada by uniting scientific experimentation with practical verification, as exemplified by the development of the hardy strains of wheat that were so influential in expanding Western Canadian agriculture;
- it is a rare example of a farm within a city, the Central Experimental Farm has become a symbol of the central role agriculture has played in shaping the country.

Eager to introduce profitable new agricultural methods and products, the federal government created the Central Experimental Farm in 1886. The Department of Agriculture selected a rectangular parcel of land, over 400 hectares in area, approximately 3 km from Parliament Hill. Located on a desirable site, due to its variety of soil types and access to land, water, and rail transport, the farm would serve both Ontario and Québec. As the city of Ottawa grew, the Farm was gradually absorbed into the urban environment and is now situated well within the city limits.

The plan of the Farm is based on three clearly defined zones: a central core of administrative, scientific, and functional farm buildings and spaces; the experimental fields, plots, and shelterbelts; and the arboretum, ornamental gardens and experimental hedges. The Farm's Picturesque landscape is the result of a movement promulgated by a 18th century English aesthetic theorists and practitioners who sought to bring landscape design closer to an idealized nature. One convention of this movement was the adoption of certain standard features of the British country estate, including large stretches of lawn and fields, use of water, masses of trees and shrubbery, and winding pathways. These features, designed to enhance nature's inherent beauty by emphasizing its irregularity, variety, and intricacy in form, colour, and texture, integrate harmoniously with the administrative, scientific, and functional farm buildings. The Picturesque qualities of the Farm are a significant aspect of the 19th-century philosophy of agriculture.

This philosophy also recommended the use of chemistry and genetics to make farm life more productive and appealing. Its proponents sought to develop better farming methods by applying a new scientific methodology to farming. Since its establishment, the Central Experimental Farm has contributed substantially to the development of Canadian agriculture through scientific research, experimentation, and practical verification. The Farm has addressed issues such as human and animal health, the importation of plants and livestock, the identification and control of imported insect pests, and soil fertility. It also contributed to the expansion of agriculture in western Canada through the development of hardy strains of wheat, and in eastern Canada through research on forages and grasses. The Farm soon became the headquarters of a national system of experimental farms, as its central location and administration served to address a range of national agricultural issues.

6.1.3 Character-Defining Elements

Key elements contributing to the heritage value of this site include:

- its location in the urban centre of Ottawa, encompassing a variety of soil types, cleared fields, and various buildings;
- its pastoral appearance, as well as the orderliness and neatness critical to the Farm's scientific pursuits;
- its plan, made up of three clearly defined zones: the central core of the functional farm, science and administration buildings; the experimental fields and plots with their bordering shelterbelts; and the arboretum, ornamental gardens and experimental hedges;
- the buildings, which illustrate the Picturesque character with their compatible scale, varied volumes and silhouettes.

Key elements contributing to the heritage value of the central core include:

- the intimate scale of the interior of the zone, and the campus-like atmosphere;
- the compatible scale and design of both Prince of Wales Drive and the Driveway, which have evolved from the main north-south and east-west roads in the original 1880s plan and link the Farm to the city;
- the placement and design of the core administration buildings with their wood-clad exteriors, and their relationships to each other and to their landscape setting, which reveal their original functions and the orderly development of the original 1880s Picturesque plan;
- the associations of the buildings with key figures in the development of Canadian agriculture, such as William Saunders, Charles Saunders, and Sir John Carling;
- the buildings' small, single-storey board and batten style, conveying their continued role as part of a complex of support buildings;
- the model farm intended to demonstrate the most efficient and orderly layout of farm buildings.

Key elements contributing to the heritage value of the experimental fields, plots, and shelterbelts include:

- the orderly organization of the fields based on a grid system reinforced by a regular system of roadways and access lanes, and distinctive internal fencing of red "pencil posts" with white tops;
- the open cultivated fields, with their variable sizes, colours, textures and seasonal variations;

- the relationship between the open fields and the heavily screened Driveway with its parkway characteristics of curbs and streetlights, which emphasize the integration of a farm within a city;
- the shelterbelts, made up of hardy trees which protect the fields;
- the core brick-clad science and administration buildings;
- the viewsapes including the view from the corner of Baseline and Fisher, the view southwest from Carling Avenue across the fields, the framed view looking east from Fisher along Cow Lane; and the view from any point along the periphery into the open fields.

Key elements contributing to the heritage value of the arboretum and ornamental gardens include:

- the Picturesque nature of the site, evidenced in the skillful use of topography and water, and the incorporation of the shoreline of the Rideau Canal, Dow's Lake, and the lagoons into the visual composition;
- the circulation pattern in the arboretum, laid out in a typically Picturesque design of curving promenades and constantly changing views;
- the glass and metal frames of the greenhouses;
- the arboretum itself, including a wide variety of specimen trees and shrubs, planted to test and demonstrate suitable tree species for various hardiness zones of Canada.

6.1.4 Identified Views

The CIS identifies a number of key views in the CEF NHSC:

- The Arboretum and Ornamental Gardens
 - their distinctive views, composed in the Picturesque tradition of foreground, middle ground and background elements, including but not limited to:
 - the scenic outlooks from the arboretum ring road to Dow's Lake, the Rideau Canal, Carleton University and towards downtown Ottawa
 - the view from Prince of Wales Drive into the arboretum and ornamental gardens
 - the view south, sloping gradually downhill, within the ornamental gardens
 - views west towards the Farm from the other side of the Rideau Canal, Colonel By Drive and Dow's Lake, as well as the views from below the arboretum terraces up the slope
 - the view looking north from Prince of Wales Drive to the green barn (Building 82, formerly used for dehydrating plant samples) on the east side of the road
 - the views from the Fletcher Wildlife Gardens to Hartwell's Lockstation
 - the view of the Macoun Memorial Garden from the Driveway
- Historic Values of the Cultural Landscape
 - the view north from the bend on Prince of Wales Drive across the fields
 - the view of the Main Dairy Barn from the east and the west, emphasizing its landmark quality

- the view west along the Driveway, with its closed canopy allée of trees
- the view north across the lawn to the Saunders Building; and their associations with key figures in the development of Canadian agriculture, such as William Saunders, Charles Saunders, and Sir John Carling.
- Experimental fields, plots and shelterbelts
 - Their distinctive views, including but not limited to:
 - the view from the corner of Baseline and Fisher, looking northeast to the central core, with the Booth barn complex in the foreground
 - the view southwest from Carling Avenue across the fields
 - the framed view looking east from Fisher along Cow Lane
 - the view from any point along the periphery into the open fields.

6.2 Adjacent Federal Heritage Buildings

Section 4.1 of the CIS identifies the significance of federal heritage buildings within the CEF NHSC (and adjacent to the Site):

The Picturesque character of the core farm buildings is illustrated by their compatible scale, varied massing and silhouettes, as well as by the variety and application of their wood cladding. The same vocabulary is applied to the core science and administration buildings, but these are distinguished from the farm buildings by the use of brick cladding. The glass and metal framed greenhouses exhibit similar qualities. Buildings of the 1920s and 1930s adhere to the established design vocabulary, but are modified to suit the more functional taste of the period... the Observatory complex at the north end of the property likewise reflects the historic character of its surroundings as a “scientific campus” and contributes to the character of the Central Experimental Farm.

Additionally, three Classified buildings —the Dominion Observatory, South Azimuth Building, and Photo Equatorial Building—within the Dominion Observatory Campus are together Classified as the Dominion Observatory Complex. In the “Reasons for Designation” in its Heritage Character Statement, the complex is valued for the:

- architectural and historical significance of the ensemble, and also for environmental reasons
- The intrinsic value of the three buildings (Dominion Observatory, South Azimuth Building & Photo Equatorial Building) is enhanced by the integrity of their campus-like setting and the harmonious relationship with the surrounding Central Experimental Farm, and since,
- The three buildings form a Picturesque ensemble that harmonizes with the natural setting of the Experimental Farm. A 1946 aerial photograph illustrates the original sinuous circulation pattern, which is largely intact, as well as whimsical star-shaped flower beds that no longer exist. Management of the landscape should be in keeping with early patterns.

Individual heritage character statements and SOS for the adjacent Federal Heritage Buildings are provided in APPENDIX A.

The heritage character statement for the Annex, a Recognized Federal Heritage Building, is included in APPENDIX A for reference only as the process for its demolition has commenced. As described in Section 4.2.5, the building was thoroughly documented and recommended for removal in “Best Efforts” reporting, and the TOH and designer HDR have committed to incorporating design and commemorative elements of the Annex into the Project.

6.3 Rideau Canal NHSC/WHS

The Rideau Canal was initially designated as a national historic site in 1925, and in 2007 was inscribed on the UNESCO World Heritage List.

6.3.1 Rideau Canal NHSC

The SOS for the Rideau Canal NHSC, as presented in the CRHP, is outlined in the following subsections.

6.3.1.1 *Description of Historic Place*

Rideau Canal National Historic Site of Canada is a 202-km long man-made waterway running through a corridor of communities from Ottawa River to Lake Ontario. It was built from 1826 to 1832. The designation includes lands alongside the canal which are administered by Parks Canada.

6.3.1.2 *Heritage Value*

Rideau Canal was designated a national historic site of Canada in 1926 to mark the hundredth anniversary of the beginning of its construction because of the significance of:

- the construction of the canal system;
- the survival of a high number of original canal structures including locks, blockhouses, dams, weirs and original lockmasters' houses plus the integrity of most lockstations; and
- the unique historical environment of the canal system.

The heritage value of the Rideau Canal lies in the health and wholeness of its cultural landscape, as a witness of the early 19th century forms, materials and technologies of the waterway, and as a dynamic reflection of the longstanding human and ecological inter-relationships between the canal and its corridor. The Rideau Canal was built for the British government by Lieutenant-Colonel John By as a defensive work in 1826-1832. Canada assumed responsibility for its management in 1855, and the waterway served as a commercial transportation route through most of the 19th and 20th centuries. Parks Canada acquired the canal to sustain its recreational operation in 1972.

6.3.1.3 *Character Defining Elements*

Aspects of this site which contribute to its heritage values include:

- the completeness of the cultural landscape as a longstanding system of transportation facilities including the waterway, locks, blockhouses, dams, weirs and lockstations with lockmasters' houses, associated shore lands and communities, extensive wetlands and lakes,
- the canal bed and its subdivision into lockstations,
- the original built resources, in particular, the form, craftsmanship, materials and locations of its early blockhouses, lockmasters' houses, and lockstation buildings canal walls, locks, dams and weirs,

- defensive siting, materials and functional design of blockhouses, lockmasters' houses and lockstation landscapes, and remnants such as the guardhouses at Jones Falls and Morton's Dam,
- archaeological remnants of construction including the ruin of the engineers' building, the remains of the lime kilns, the Sapper's Bridge and blacksmith shop at the Ottawa Locks, the construction camp at Newboro,
- remnants of engineering design including the canal route, walls, locks, weirs, bridges such as the remains of Ottawa's Sapper's Bridge and submerged bridge at the Jones' Falls dam, and dams (especially the stone arch dams at Long Island and Jones Falls, and the underwater site of the original dam at Merrickville), and the operational technologies including the manual operation of all locks except Newboro, Black Rapids and Smiths Falls Combined Locks,
- the wetlands and lakes created by the canal construction,
- on-going operation of the canal and all evidence of its continuous seasonal operation since 1832 (particularly the integral role of its engineering works in the sustained operation of the navigation system as witnessed by facilities at all locks except Locks 29, 30 and 31 at Smiths Falls Combined, the surviving historic layout and configuration of lockstations including their patterns of open space and circulation),
- the continuity of historic, ecological and visual associations with shore lands and communities along the route, particularly pathways, view sheds from the canal locks and channel to the central core of Ottawa between the Mackenzie King Bridge and the Ottawa River, view sheds between the canal, the fortifications, the harbour in the landscape of Kingston harbour, views from the canal shore lands and communities between Becketts Landing and Kilmarnock lockstation, along Newboro channel, at Chaffeys Locks, and at the lockstations at Davis Locks, Jones Falls, Upper and Lower Brewers and Kingston Mills.

6.3.2 Rideau Canal WHS

The Rideau Canal's Statement of Outstanding Universal Value (OUV), as inscribed on the UNESCO World Heritage List, is outlined in the following subsections.

6.3.2.1 *Statement of Outstanding Universal Value*

6.3.2.1.1 Description

The Rideau Canal, a monumental early 19th century construction covering 202 km of the Rideau and Cataraqui rivers from Ottawa south to Kingston Harbour on Lake Ontario, was built primarily for strategic military purposes at a time when Great Britain and the United States vied for control of the region. The site, one of the first canals to be designed specifically for steam-powered vessels, also features an ensemble of fortifications. It is the best-preserved example of a slackwater canal in North America, demonstrating the use of this European technology on a large scale. It is the only canal dating from the great North American canal-building era of the early 19th century to remain operational along its original line with most of its structures intact.

6.3.2.1.2 Outstanding Universal Value

The Rideau Canal is a large strategic canal constructed for military purposes which played a crucial contributory role in allowing British forces to defend the colony of Canada against the United States of America, leading to the development of two distinct political and cultural entities in the north of the American continent, which can be seen as a significant stage in human history.

Criterion (i): The Rideau Canal remains the best-preserved example of a slackwater canal in North America demonstrating the use of European slackwater technology in North America on a large scale. It is the only canal

dating from the great North American canal-building era of the early 19th century that remains operational along its original line with most of its original structures intact.

Criterion (iv): The Rideau Canal is an extensive, well preserved and significant example of a canal which was used for a military purpose linked to a significant stage in human history - that of the fight to control the north of the American continent.

The nominated property includes all the main elements of the original canal together with relevant later changes in the shape of watercourses, dams, bridges, fortifications, lock stations and related archaeological resources. The original plan of the canal, as well as the form of the channels, has remained intact. The Rideau Canal has fulfilled its original dynamic function as an operating waterway without interruption since its construction. Most of its lock gates and sluice valves are still operated by hand-powered winches.

All the elements of the nominated area (canal, associated buildings and forts) are protected as national historic sites under the Historic Sites and Monuments Act 1952-3. A buffer zone has been established. Repairs and conservation of the locks, dams, canal walls and banks are carried out directly under the control of Parks Canada. Each year one third of the canal's assets are thoroughly inspected by engineers. A complete inventory thus exists of the state of conservation of all parts of the property. A Management Plan exists for the canal (completed in 1996 and updated in 2005), and plans are nearing completion for Fort Henry and the Kingston fortifications. The Canal Plan is underpinned by the Historic Canals Regulations which provide an enforcement mechanism for any activities that might impact on the cultural values of the monument.

6.3.3 Identified Views

For the area of the Site, the *Rideau Corridor Landscape Strategy* identified two views of the CEF NHSC from the Rideau Canal NHSC/WHS, both facing west from the east side of Dow's Lake (Parks Canada & Dillon 2012: Map 1) (Figure 22 and Figure 17 and Figure 18). A rationale for these views is not provided, and their "values" are related to "Tourism", "Nature", and "Other", but not "Heritage/ culture" (Parks Canada & Dillon 2012: Appendix B).

As the *Strategy* also noted for Subsector 1a the values, views, and visual relationships of the "Hartwells Lockstation and turning basin" and "the bridges and views to the Canal from them" (see Section 3.2.1.4) it can also be assumed that key views of the Rideau in the area of the Site include:

- Views north from Hartwells Lockstation
- Views east from the Bronson Avenue Bridge (Figure 19)

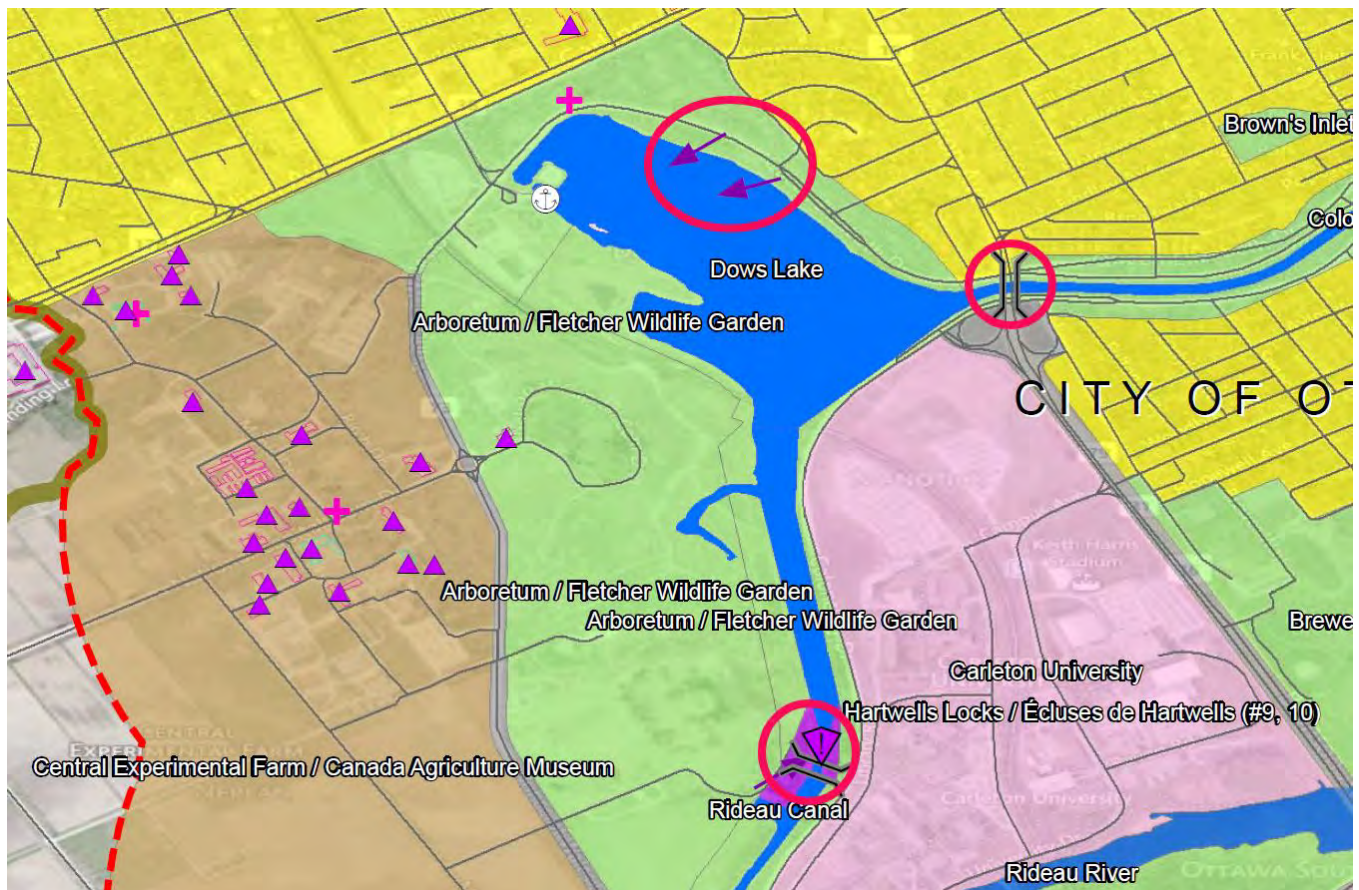


Figure 22: Detail of Map 1 in the *Rideau Corridor Landscape Strategy* with the identified views from Dow's Lake, the Bronson Avenue Bridge, and Hartwells Lockstation circled in red.

6.4 Queen Elizabeth Driveway [Prince of Wales Drive] Cultural Landscape

The following SOS for the Queen Elizabeth Driveway—which was renamed Prince of Wales Drive west of Preston Street—is excerpted from the *Definition and Assessment of Cultural Landscapes of Heritage Value on NCC Lands* report (Smith and Associates 2004:65-67). It is owned by the City of Ottawa.

6.4.1 Description of Place

The Queen Elizabeth Driveway is a principal organizing element in the urban design of Ottawa and is closely associated with Ottawa's Capital identity. In its original and current forms, it is also an important example of parkway urban design principles espoused by Frederick Law Olmsted and his followers at the turn of the 20th century. Its landscape design represents the contribution of several people, including: Robert Surtees and Alexander Stuart of the Ottawa Improvement Commission; William Saunders, Director of the Central Experimental Farm; Frederick Todd, a prominent landscape architect whose 1904 plan for the Ottawa Improvement Commission was gradually adopted as the Driveway was developed; and Herbert S. Holt, who recommended in 1915 that Todd's plan be implemented.

The values of the Queen Elizabeth Driveway Cultural Landscape are connected to two principal cultural ideas. The first is capital place-making. The second is urban beautification. The boundaries of the ideas coincide, strengthening the capacity of the landscape to express them and the NCC to manage them.

The key physical component of the Queen Elizabeth Driveway cultural landscape is a 5.6-km long scenic parkway, paralleling the Rideau Canal between the National Arts Centre and the [sic] Preston Street. The Driveway originally extended from Sapper's Bridge (near Wellington Street) to the entrance gates of the Central Experimental Farm, via a causeway across Dow's Lake. While the section north of Laurier Street was effectively dismantled for vehicular traffic in the 1960s with the construction of the National Arts Centre, the entire length of the route covered by the original driveway is passable by pedestrians and cyclists. For this reason, it should be included within the cultural landscape boundaries.

Queen Elizabeth Driveway should also include its extension on AAFC land beyond Preston Street, through the Central Experimental Farm to the traffic circle. This section was developed after the causeway across Dow's Lake disappeared. The cultural landscape should also include all properties located immediately adjacent to the Driveway's current western edge, even though these places (with the exception of the Cartier Square Drill Hall) are not under the custodianship of the NCC or other federal bodies.¹ Parkway were intended to be broad, park-like spaces containing a road connecting parks, or in the case of Ottawa, major federal institutions set within landscaped grounds. In so doing, the parkway served as an extension of its landscaped ends, not as the container for a road. In the 1910s and 20s, residences erected along the Driveway conformed to the picturesque aesthetic of the Driveway in terms of their scale, setbacks, plantings and style. The owners of these homes shared the ideals of the Ottawa Improvement Commission, which, at the time, was a largely civic enterprise. Without the compliance of residents in the scheme, the western edge of the Driveway would have greatly diminished the park-like design of the whole.

The Queen Elizabeth Driveway Cultural Landscape encompasses several NCC properties containing key character-defining elements. These include:

- NCC land on either side of the road, including Commissioner's Park and Brown's Inlet
- NCC land along the perimeter of Dow's Lake.

6.4.2 Cultural Landscape Value

The value of the Queen Elizabeth Driveway lies in its association with:

- The creation of Ottawa's Capital identity
- Parkway urban design principles as they evolved from the early- to the mid-20th century
- Ottawa urban beautification projects.
- The value of the Queen Elizabeth Driveway also lies in its continuing contributions to:
 - Urban design in Ottawa

¹ The NCC owns up to Preston Street and the lands associated with Commissioners Park, as well as access to the Dows Lake Pavillion. The Federal Government owns the CEF NHSC and Arboretum.

- Capital identity, including its use as the location of activities such as the Tulip Festival and Winterlude.

6.4.3 Character-Defining Elements

Elements associated with NCC lands and activities that contribute to the value of the Queen Elizabeth Driveway Cultural Landscape are:

- The overall spatial structure of the Driveway, consistent with parkway and picturesque ideals, including: broad, park-like spaces on either side of road; the purposeful curving of the road to replicate a more natural setting; and the sculpting of park spaces with mounds to create more dramatic settings for plantings and a more lively drive
- Pre-1950 detailing of hard landscape features, such as iron railings and concrete curbs, stairs, stone walls and paths, that illustrate the extent to which the Driveway represents a formally planned, carefully executed landscape to be appreciated in person or through photographs
- The comfort station and tool house constructed in Central Park in 1924, illustrating the cohesiveness of the Driveway's aesthetic goals over time
- The Pretoria and O'Connor street bridges, with their rustic, arts-and-craft styling that brought the gardenesque treatment from the earliest period of the Driveway closer to contemporary tastes of the period
- Commissioner's Park, which plays an important role in completing the parkway's original design intentions
- Tulip beds along the Driveway, and especially within Commissioner's Park, that have been part of the Driveway's appeal for over 50 years
- All surviving planting schemes and garden beds associated with Saunders and Macoun, that illustrate the way in which continuity between the Capital's major institutions was expressed through landscape treatments

6.4.4 Identified Views

The key views of the Queen Elizabeth Driveway are not explicitly defined in the SOS but can be assumed in the vicinity of the Site to be the linear and serial views of the route:

- facing north when travelling northbound from the traffic circle intersection with the National Capital Commission Scenic Driveway (Figure 20)
- facing east then south when travelling east and southbound from Commissioners Park

7.0 IMPACT ASSESSMENT

7.1 Description of the Proposed Development

The Project is intended to replace the existing 1053 Carling Avenue campus and become the major referral centre for Eastern Ontario, Western Quebec, and parts of Nunavut, as well as the home of the Eastern Ontario Trauma Centre and a range of specialized services, research, and education facilities and related ancillary uses such as resident care stay facilities, and retail service uses. As currently planned, the Project will involve construction of a number of components, described in the following subsections and illustrated in APPENDIX B.

7.1.1 Main Hospital Building

The Project is intended to replace the existing 1053 Carling Avenue campus and become the major referral centre for Eastern Ontario, Western Quebec, and parts of Nunavut, as well as the home of the Eastern Ontario Trauma Centre and a range of specialized services, research, and education facilities and related ancillary uses such as resident care stay facilities, and retail service uses. As currently planned, the Project will involve construction of the following components:

- Main Plaza
 - Centrally located with traffic circle and accessed from Carling Avenue at a southern extension of Champagne Avenue South
 - A Corporate Education Area (including Auditorium) along the south side and adjacent to the Main Plaza that pays homage to the West Annex
 - The intent is to replicate views from the original Annex Cafeteria into the mature escarpment trees as well as emulating the use of expansive glass and free span structure in a new and contemporary manner. The proposed new form also emulates the originally intended rounded design form for the Annex found in the Library and Archives Canada. Will include an entry urban plaza feature at the corner of Carling and Champagne Avenues
- Central Podium
 - Five storeys between and connecting the North and South Towers
- North and South Towers
 - North Tower will have eight above-grade levels and stand approximately 37 m high
 - South Tower will have twelve above-grade levels and stand approximately 57 m high
- Research Building along Carling Avenue to have ten stories above grade and stand approximately 40 m high.
- Primary ambulance access is currently routed to the west side of the Central Podium, depressed into the landscape and will enter the CEF NHSC from Carling Avenue at Maple Drive then enter the Site at the intersection with Winding Lane. Secondary ambulance access is from Prince of Wales Drive, north of the traffic circle
- A central utility plan will be depressed into the landscape in the northwest corner of the hospital building.

- A structured parking garage is to be located in the south east corner of the patient access zone and will span the Trillium LRT line. The structure itself will cover 23,325 square metres, have four levels with a green roof and stand approximately 16.75 m above grade. Limited Surface parking areas are located peripheral to the main hospital building.

7.1.2 Carling Village

The proposal also includes the establishment of a new station entrance to the Trillium Line (Dow's Lake Station) to be flanked on both east and west sides by three towers (Tower A, B, and C). The towers would house a range of uses with approximately 750,000 square feet including retail and service uses at the ground floor with office and resident care and stay facilities on the upper floors as follows:

- Tower A on the west side of the new Dows Lake Station: 9 stories above grade at Carling Avenue transitioning to 18 stories above grade and stand approximately 71 m high;
- Tower B on the east side of the new Dows Lake Station: 9 stories above grade and stand approximately 36 m high; and
- Tower C at the corner of Carling Avenue and Preston Street: 15 stories above grade and stand approximately 59 m high.

7.1.3 Site Preparation

Preparation of the site will involve:

- Removal of the DARA Tennis Club
- Grubbing and vegetation removal
- Grading
- Large-scale excavation for below-grade levels and a central utility plant
- Remediating contaminated soil left on-site during the Sir John Carling Building implosion
- Laydown areas, crane pad construction, and temporary access works

The master phasing plan runs from 2021 to approximately 2048 over the course of 10 identified phases, with the first phase of the hospital anticipated to be complete in 2028 and additions anticipated in 2038 and 2048.

7.2 Impact of Proposed Development

When determining the effects a development or site alteration may have on known or identified built heritage resources or cultural heritage landscapes, the City's *A guide to preparing cultural heritage impact statements* advises that the following "adverse impacts" be considered:

- **Demolition** of any, or part of any, heritage attributes or features²
- **Alteration** that is not sympathetic, or is incompatible, with the historic fabric and appearance of a building³

² This is referred to as "destruction" in the MHSTCI *Heritage Resources in the Land Use Planning Process* and used as an example of a *direct* impact in the MHSTCI *Info Bulletin 3*.

³ The example in the MHSTCI *Heritage Resources in the Land Use Planning Process* does not include the work "building" and is a *direct* impact in the MHSTCI *Info Bulletin 3*.

- **Shadows** created that obscure heritage attributes or change the viability of the associated cultural heritage landscape⁴
- **Isolation** of a heritage resource from its surrounding environment, context or a significant relationship⁵
- **Obstruction** of significant identified views or vistas within, from heritage conservation districts;
- **Obstruction** of significant identified views or vistas within, from individual cultural heritage resources⁶
- **A change in land use** where the change affects the property's cultural heritage value⁷
- **Land disturbances** such as a change in grade that alters soils, and drainage patterns that adversely affect a cultural heritage resource⁸

Other potential impacts may also be considered such as encroachment or construction vibration (Figure 23). Historic structures, particularly those built of masonry, are susceptible to damage from vibration caused by pavement breakers, plate compactors, utility excavations, and increased heavy vehicle travel in the immediate vicinity. Like any structure, they are also threatened by collisions with heavy machinery, subsidence from utility line failures, or excessive dust (Randl 2001:3-6).

⁴ In the MHSTCI *Heritage Resources in the Land Use Planning Process* the shadow impact references altering “the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden”. It is an *indirect* impact in the MHSTCI *Info Bulletin 3*.

⁵ In the MHSTCI *Heritage Resources in the Land Use Planning Process* this refers to isolation of a heritage attribute and is an *indirect* impact in the MHSTCI *Info Bulletin 3*.

⁶ In the MHSTCI *Heritage Resources in the Land Use Planning Process* the impact example for “obstruction” is combined to “Direct or indirect obstruction of significant views or vistas within, from, or of built and natural features. It is an example of a *direct* and *indirect* impact in the MHSTCI *Info Bulletin 3*. It is a *direct* impact when significant views or vistas within, from or of built and natural features are obstructed, and an *indirect* impact when “a significant view of or from the property from a key vantage point is obstructed”.

⁷ A change in land use in the MHSTCI *Heritage Resources in the Land Use Planning Process* uses the examples of “such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces”. A *direct* impact in the MHSTCI *Info Bulletin 3*.

⁸ No change from the MHSTCI *Heritage Resources in the Land Use Planning Process*, although in the latter this refers only to archaeological resources. In the MHSTCI *Info Bulletin 3* this is an example of a *direct* impact to “provincial heritage property, including archaeological resources”.

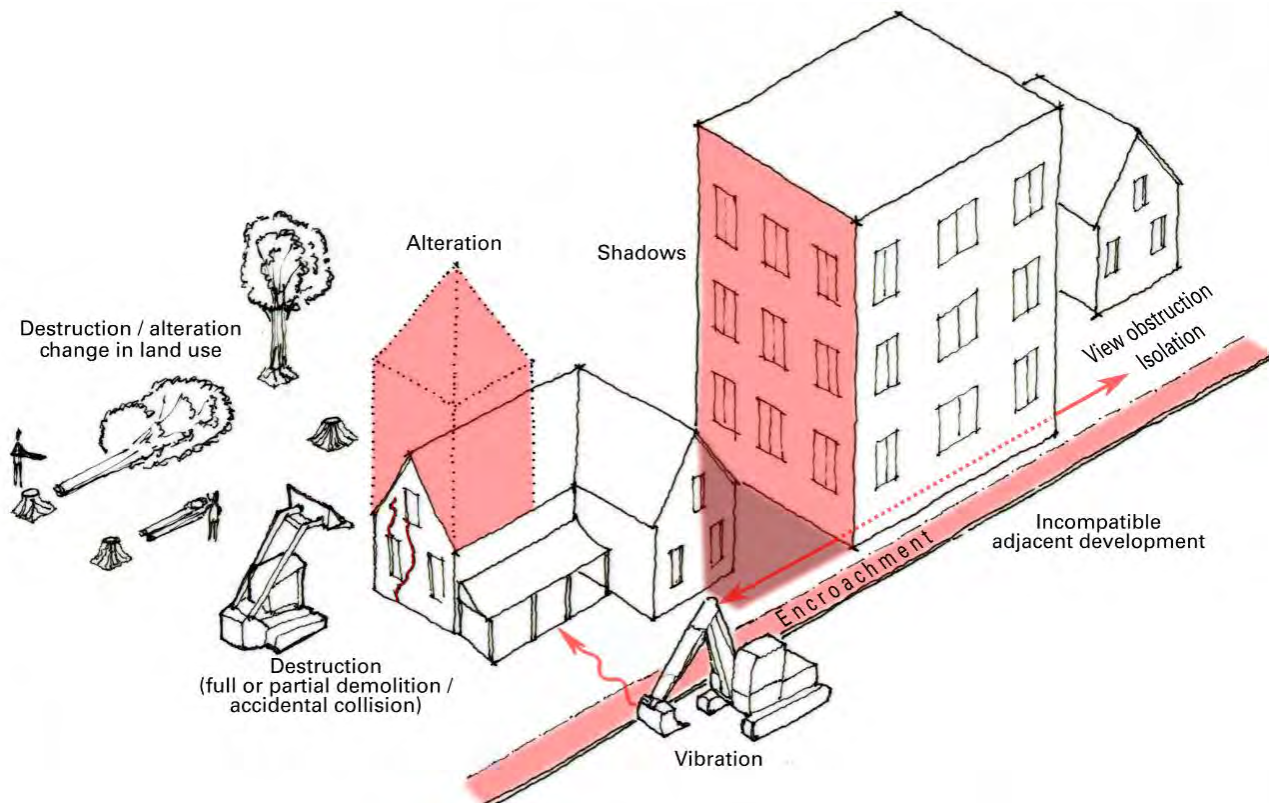


Figure 23: Examples of adverse impacts.

Although the City's *A guide to preparing cultural heritage impact statements* and *MHSTCI Heritage Resources in the Land Use Planning Process* identify types of impact, it does not advise on how to describe their nature or extent. For this the *MHSTCI Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (1990:8) provides criteria of:

- **Magnitude** - amount of physical alteration or destruction that can be expected
- **Severity** - the irreversibility or reversibility of an impact
- **Duration** - the length of time an adverse impact persists
- **Frequency** - the number of times an impact can be expected
- **Range** - the spatial distribution, widespread or site specific, of an adverse impact
- **Diversity** - the number of different kinds of activities to affect a heritage resource

Since the *MHSTCI Guideline* or any other Canadian source of guidance do not include advice to describe magnitude, the ranking provided in the *ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* (ICOMOS 2011: Appendix 3B) is adapted here. Though developed specifically for World Heritage Sites, it is based on a general methodology for measuring the nature and extent of impact to cultural resources in urban and rural contexts developed for the UK Highways Agency *Design Manual for Roads and Bridges* [DMRB]: *Volume 11*, HA 208/07 (2007: A6/11) (Bond & Worthing 2016:166-167) and aligns with

approaches developed by other national agencies such as the Irish Environmental Protection Agency (reproduced in Kalman & Létourneau 2020:390) and New Zealand Transport Agency (2015).

The ICOMOS impact assessment ranking is:

- **Major**
 - Change to key historic building elements, such that the resource is totally altered.
 - Comprehensive changes to the setting.
- **Moderate**
 - Changes to many key historic building elements, such that the resource is significantly modified.
 - Changes to the setting of an historic building, such that it is significantly modified.
- **Minor**
 - Change to key historic building elements, such that the asset is slightly different.
 - Change to the setting of an historic building, such that it is noticeably changed.
- **Negligible**
 - Slight changes to historic building elements or setting that hardly affect it.
- **No impact**
 - No change to fabric or setting.

Unlike the MHSTCI's guidance, the City's *A guide to preparing cultural heritage impact statements* also provides the examples of "positive impacts" but these appear to be limited to assessments for "cultural heritage resources districts".

An assessment of potential impacts resulting from the Project is presented in Table 3 below.

Table 3: Impact Assessment and Recommended Conservation/ Mitigation Measures

Adverse Impact Example	Analysis of impact	Summary of impact <i>without</i> mitigation	Summary of impact <i>with</i> mitigation
Demolition of any, or part of any, heritage attributes or features	<p>The Project will involve demolition of the courts and clubhouse of the DARA Tennis Club, but these are not considered to be heritage attributes or character-defining elements of the CEF NHSC.</p> <p>The Project will therefore not involve demolition of any, or part of any, significant heritage attributes or character-defining elements and features of the property such as the William Saunders Building, structures within the Dominion Observatory Campus, or features associated with the CEF NHSC.⁹ It will also not demolish any part of the Rideau Canal NHSC/WHS as the Site is outside the 30-m buffer zone.</p>	No impact.	No mitigation recommended.
Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance of a building	<p>The Project will not result in any alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance of the adjacent Federal Heritage Buildings within the CEF NHSC. All construction for the Project will be limited to the Site and will not include modifying any existing structures.</p> <p>Although not an alteration to “the historic fabric and appearance of a building”, the Project is predicted to alter the fabric and appearance of the cultural landscape of the CEF NHSC, which is valued for its historical, aesthetic, and environmental values. Through new construction of multiple tall buildings and landscape elements the Project will change the current treed parkland conditions in the northeast portion of the CEF NHSC as well as encroach on the open areas north and east of the William Saunders Building. However, the original landscape character in the northeast portion of the CEF NHSC had already seen substantial alteration and clearance for construction of the 11-storey Sir John Carling Building and associated annexes and parking areas in 1967; while the Sir John Carling Building was of a different massing and scale to the Project, it nevertheless represents an important precedent for high-rise and surface parking development in the northeast portion of the CEF NHSC. Additionally, while the Project encroaches approximately 14.8 hectares of the CEF’s 275.8 hectares (representing approximately 5.4% of the CEF NSHC’s overall area), its encroachment into greenfield outside the former Sir John Carling Building campus represents only approximately 1.9% of the CEF NSHC’s overall area. This encroachment north and east of the William Saunders Building is primarily to create sunken parking areas, which will continue the existing conditions characterized by a tennis court with associated clubhouse and parking lots with treed edges associated with the Arc Biotech Building (Building No. 34) on the west side of Maple Drive. The only area of original parkland that had survived in this zone is found between the north extent of Birch Drive and east laneway extension of Winding Lane. For these reasons, the overall magnitude from alteration without mitigation is judged to be “minor” since the Project will not result in the CEF NHSC being “<i>significantly modified</i>” (see ICOMOS ranking for “moderate”).</p> <p>The Project will not directly alter the historic fabric or appearance of the Rideau Canal NHSC/WHS as it is outside the 30-m buffer zone.</p>	<p>Minor, irreversible and direct impact that is site-specific and permanent, and will occur continually over a long period of time.</p> <p>This magnitude reflects the approximately 5.3-hectare encroachment beyond the “headquarters zone” created 52 years ago when the 11-storey Sir John Carling Building was constructed on the Site. This encroachment represents approximately 1.9% of the CEF NSHC’s 276-hectare area.</p>	By implementing the mitigation measures recommended in Section 7.4, there will be negligible, irreversible and direct impact that is site-specific and permanent, and will occur continually over a long period of time.
Shadows created that obscure heritage attributes or change the viability of the associated cultural heritage landscape	Shadow study modelling was prepared that included four days of the year and indicates that the Project will create shadows that obscure the appearance of the Observatory House (Building No. 2) and Geophysical Laboratory Building (Building No. 3), both of which are Recognized Federal Heritage Buildings valued for their architectural design and connection to the Dominion Observatory Campus. However, this impact will be limited to the mornings in December through to March, and a shadow over 100% of the Observatory House (Building No. 2) building will only be cast in the mornings during the months of December to February. The	Negligible, irreversible and indirect impact that is site-specific and will occur infrequently over a short period of time each year.	No mitigation recommended.

⁹ As mentioned in Sections 4.2.5 and 6.2, removal of the Sir John Carling Building Annex was previously approved and a tender has been issued for its demolition.

Adverse Impact Example	Analysis of impact	Summary of impact <i>without</i> mitigation	Summary of impact <i>with</i> mitigation
	<p>Project will also cast shadows that alter the appearance of the north portion of the Prince of Wales Drive/ Queen Elizabeth Driveway cultural landscape, but this is limited to the evenings of June and March (see 7.2.1 and APPENDIX C).</p> <p>Outside of these negligible impacts, the modelling determined that no other elements of the CEF NHSC, the Dominion Observatory Complex (as well as most of the Dominion Observatory Campus), and Rideau Canal NHSC/WHS will have heritage attributes or character-defining elements obscured by shadows cast by the Project. The Project will also not contribute new shadow to those already cast over the Rideau Canal NHSC/WHS by the existing towers on the north side of Carling Avenue.</p> <p>Importantly, due to its location in the northeast portion of the CEF NHSC, the Project will not cast any shadows that change the viability of plantings in the ornamental gardens, display beds, and experimental fields, nor those in the Arboretum.</p>		
<p>Isolation of a heritage resource or part thereof from its surrounding environment, context or a significant relationship</p>	<p>The Project will not result in isolation of a heritage resource or part thereof from its surrounding environment, context or a significant relationship. The Project is sited between the Dominion Observatory Campus and the Rideau Canal NHSC/WHS but there is no historical evidence to suggest that these two places share a significant physical, visual, or contextual relationship. Although the dome of the Dominion Observatory can be seen today from several vantage points on the east side of Dow's Lake, and from Commissioners Park and Prince of Wales Drive, there is no reference to the significance of these views in the Dominion Observatory Heritage Character Statement, which refers only to its environmental value as "visually prominent by virtue of its distinctive design, massing, materials and location" and "its visual prominence owing to its distinctive design, massing, materials and location." There is also no reference to the significance of distant views of the dome in the Heritage Character Statement for the Dominion Observatory Complex, the CEF NHSC Management Plan and CIS, the Rideau Canal Landscape Strategy, nor the Queen Elizabeth Driveway SOS. Additionally, between 1967 and 2014 the 11-storey Sir John Carling Building blocked all views of the dome of the Dominion Observatory from the east side of Dow's Lake (see Figure 6).</p> <p>The Project will isolate the rear elevation of the William Saunders Building from the Dominion Observatory Campus, but here too there is no evidence in the heritage character statements of the William Saunders Building, Dominion Observatory, and Dominion Observatory Complex, as well as the CEF NHSC Management Plan and CIS, to suggest the buildings in these two locations share a significant relationship, nor that developing the area between them represents isolation of either building or the Campus from its surrounding environment or context.</p>	<p>No impact.</p>	<p>No mitigation required.</p>
<p>Obstruction of significant identified views or vistas within, from heritage conservation districts</p>	<p>Three-dimensional modelling determined that the Project will change the existing conditions, but will not obstruct any significant identified views or vistas within or from heritage conservation districts, in this case the CEF NHSC and Rideau Canal NHSC/WHS (see Section 7.2.2 and APPENDIX D).</p> <p>Six identified views for the CEF NHSC will be affected, as will three identified for the Rideau Canal NHSC/WHS, and the two identified for the Queen Elizabeth Driveway cultural landscape. However, in all cases the Project does not represent a substantial change to views within or of the CEF NHSC, or the views from the Rideau Canal NHSC/WHS or Prince of Wales Drive that existed when the 11-storey Sir John Carling Building was standing on the Site between 1967 and 2014. As described in Section 3.2.1.4.2, this Institutional/ Campus landscape character is not reflected in the 2012 <i>Rideau Corridor Landscape Strategy</i>, which mischaracterized the Site as both Agricultural/ Farmland and Managed Landscape LCUs. The change</p>	<p>Minor, reversible and indirect impact that is site-specific and permanent, and will occur continually over a long period of time.</p> <p>This magnitude reflects the minor change to views compared to when the 11-storey Sir John Carling Building was standing on the Site between 1967 and 2014.</p>	<p>By implementing the mitigation measures recommended in Section 7.4, there will be negligible, irreversible and indirect impact that is site-specific and permanent, and will occur continually over a long period of time.</p>

Adverse Impact Example	Analysis of impact	Summary of impact <i>without</i> mitigation	Summary of impact <i>with</i> mitigation
	<p>in views created by the Project therefore does not represent a “high sensitivity” change from an Agriculture/ Farmland LCU and Managed Landscape LCU to Institutional/ Campus LCU, rather is a change from “less developed” Institutional/ Campus LCU to “more developed” Institutional/ Campus LCU. Additionally, as described in Section 6.3.3, the “values” associated with the views west across Dow’s Lake identified in the <i>Rideau Corridor Landscape Strategy</i> are related to “Tourism”, “Nature”, and “Other”, but not “Heritage/ culture”.</p> <p>In summary, the overall impact of visual change will be minor and at the periphery of all identified views due to the location of the Site at the northeast portion of the CEF NHSC and northeast of a lake extending north from the route of the Rideau Canal NHSC/WHS.</p>		
<p>Obstruction of significant identified views or vistas within, from individual cultural heritage resources</p>	<p>One of six significant views identified for the CEF NHSC is the “view north across the lawn to the Saunders Building”. Three-dimensional modelling of this view determined that the Project will change the existing conditions but not <i>obstruct</i> any identified views or vistas of or from the William Saunders Building (see Section 7.2.2 and APPENDIX D). The Project will be visible in the backdrop of the view but does not represent a substantial change to the view that existed when the 11-storey Sir John Carling Building was standing on the Site between 1967 and 2014. Views north from the rear, north side of the William Saunders Building have not been identified as significant. Therefore, the overall impact to views of the William Saunders Building will be minor.</p> <p>The Project will obstruct <i>current</i> views of the dome of the Dominion Observatory from vantage points on the east side of Dow’s Lake, and from Commissioners Park and Prince of Wales Drive. However, as described above in the assessment for isolation, there is no reference to the significance of distant views of the Dominion Observatory dome in the building’s Heritage Character Statement, the Heritage Character Statement for the Dominion Observatory Complex, the CEF NHSC Management Plan and CIS, the Rideau Canal Landscape Strategy, nor the Queen Elizabeth Driveway SOS. Also as mentioned above, the 11-storey Sir John Carling Building blocked all views of the dome of the Dominion Observatory from the east side of Dow’s Lake between 1967 and 2014.</p> <p>Views from the Dominion Observatory dome are also not referenced as significant in its Heritage Character Statement, but it can be inferred they are central to the building’s original purpose. Three-dimensional modelling and map analysis determined that impacts to views from the Dominion Observatory dome — should a telescope be reinstalled at some point in the future— will be irreversible and permanent once vertical and south expansions to the north tower of the Hospital Building are realized, not just to views but also some effects from light spillover. However, this impact is indirect, site-specific and overall minor in magnitude since the dome will retain a considerable range of view of the night sky toward the south (see APPENDIX D). Alternatives to avoid or reduce this minor impact have not been considered since a project to reinstall a telescope has not been initiated and any negative effects to its views would be outweighed by the social benefits associated with establishing a new Hospital Building.</p> <p>Three-dimensional modelling and map analysis also determined that the Project will not obstruct any significant views or vistas within or from individual cultural heritage resources in the Rideau Canal NHSC/WHS, such as views north from Hartwell’s Lockstation and views west from the Bronson Avenue Bridge.</p>	<p>Minor, reversible and indirect impact that is site-specific and permanent, and will occur continually over a long period of time.</p> <p>This magnitude reflects the minor change to views compared to when the 11-storey Sir John Carling Building was standing on the Site between 1967 and 2014.</p>	<p>By implementing the mitigation measures recommended in Section 7.4, there will be negligible, reversible and indirect impact that is site-specific and permanent, and will occur continually over a long period of time.</p>

Adverse Impact Example	Analysis of impact	Summary of impact <i>without</i> mitigation	Summary of impact <i>with</i> mitigation
<p>A change in land use where the change affects the property's cultural heritage value</p>	<p>The Project will result in a change in land use on the Site, transitioning this portion from its historical and contextual or environmental values associated with the development of the CEF and the AAFC. It will also change the existing land use by filling greenfield and current parkland areas surrounding the Annex and now-demolished Sir John Carling Building with new structures, parking areas, and other infrastructure. Nevertheless, as a hospital and its ancillary uses, it will remain in institutional land use and the overall magnitude of impact is minor since this northeast portion of the CEF NHSC was historically peripheral to the operations of the CEF until it was selected as a "headquarters zone" for the Sir John Carling Building and its administrative function in 1967.</p> <p>A change in land use will also occur where the Project encroaches on the open ground north of the William Saunders Building, currently used as recreational grounds for the DARA Tennis Club. However, this change will not affect the heritage values of the CEF NHSC, which as mentioned are linked to the operation of the CEF and AAFC.</p> <p>Although it does not represent a change in land use, a functional change will occur when the primary ambulance route is established along Maple Drive. This route was selected after options to create an emergency route from Carling Avenue were found to be not feasible due to the existing grade change along Carling Avenue, which would impede the ability to create additional curb cuts west of the Sherwood Intersection. The potential for curb cuts and a new intersection along Carling East of the existing Sherwood intersection would obscure site lines for turning vehicles, require a grade difference greater than 5% to reach the upper portion of the Site and key Hospital program areas, as well as introduce driveways too close together, resulting in confusion and conflicts with public emergency room visitors that may inadvertently use an emergency vehicle route instead of a public route to access the emergency entrance. The proposed access off Maple Drive is therefore designed to be used for emergency vehicles only with anticipated capacity of 70-100 vehicles/ day, split between the Carling Avenue and Prince of Wales Drive access points.</p> <p>Not only is Maple Drive the primary access for the Dominion Observatory Campus, the proposed primary ambulance route travels directly past the South Azimuth Building (Building No. 8), which is within 2 m of the right of way. This short distance from the road, combined with its location south of a gradual curve in the road, places the South Azimuth Building at risk of impact from an emergency vehicle travelling at high speed or has lost control in icy conditions. For the latter situation, it is also expected that Maple Drive may be treated with more de-icing salt than historically, leading to a slight increase in the present-day impact on the building's masonry (Graham & Snow 2017). Without mitigation this represents a risk of major impact. Coordination will be required between TOH and AAFC.</p> <p>In relation to impacts this change represents to the operation of the CEF and AAFC, there is an understanding that since the TOH and AAFC include research functions, complimentary uses and future collaborations between the two agencies could occur in the future, and there is recognition of the need to coordinate the use of Maple Drive, possibly through a formal agreement or easement.</p> <p>The Project will not change any land uses within the Rideau Canal NHSC/WHS as it is outside the 30-m buffer zone.</p>	<p>Minor, reversible and indirect impact that is site-specific and permanent, and will occur continually over a long period of time from the change in land use within the Site. This magnitude reflects the minor change to land use compared to when the Site was used for an administrative function by the AAFC between 1967 and 2009.</p> <p>Risk of major, irreversible, and direct impact that is site-specific and permanent from when Maple Drive is converted to use as the primary ambulance route passing near the South Azimuth Building.</p>	<p>By implementing the mitigation measures recommended in Section 7.4, there will be negligible, irreversible and indirect impact that is site-specific and permanent, and will occur continually over a long period of time.</p> <p>By implementing the mitigation measures recommended in Section 7.4, there will be no impact to the South Azimuth Building.</p>
<p>Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect a cultural heritage resource</p>	<p>Since the west and south boundaries of the Site are within 60 m of most of the adjacent Federal Heritage Buildings identified in this CHIS, there is a risk that construction during the Project will result in major adverse effects from fugitive dust or construction vibration (see Carmen <i>et al.</i> 2012:31). However, with</p>	<p>Risk of major, irreversible and direct impact that is site-specific and permanent, and will occur once over a short period of time.</p>	<p>By implementing the mitigation measures recommended in Section 7.4, there will be no impact.</p>

Adverse Impact Example	Analysis of impact	Summary of impact <i>without</i> mitigation	Summary of impact <i>with</i> mitigation
	<p>stringent practices and monitoring measures in place this risk of adverse impact can be completely mitigated, resulting in no impact. No direct impact from collision with the built heritage resources within the CEF NHSC are predicted for during construction as the primary entry to the Site will be in the northeast directly from Carling Avenue. During operation of the ambulance primary access route on Maple Drive there is minimal to no risk of impact from vehicle-induced vibration (Hume 2007).</p> <p>There will be limited to no risk of impact from construction vibration or fugitive dust to the other features of the CEF NHSC outside the 60-m zone or adjacent areas of the Rideau Canal NHSC/WHS and the Prince of Wales Drive section of the Queen Elizabeth Driveway cultural landscape.</p>		

7.2.1 Shadow Impact

Despite including the criteria for shadow in its assessment guidance, neither the City nor MHSTCI identify methods to measure this impact, nor provide advice on what are acceptable thresholds for heritage properties. Only recently has the subject been explored in other jurisdictions, notably by the City of Toronto (City of Toronto 2012), City of London, UK (Mayor of London 2012), and by Historic England (2015), but these too do not offer any clear methods or measures. The most widely used approach is to integrate the heritage assessment with more general shadow studies (Short 2007).

For the proposed development, a general shadow study was conducted by HDR, who modelled shadowing for four points of the year (March, June, September, and December) between 9 am and 6 pm. From this it was possible to illustrate and estimate the percentage of new shadow effect on the surrounding built heritage resources and cultural heritage landscapes. The results of this analysis are presented in Table 4 and illustrated in APPENDIX C.

Table 4: Results from analysis of the shadow study for impacts to adjacent built heritage resources and cultural heritage landscapes.

Simulated date (from shadow study)	Impacted built heritage resource or cultural heritage landscape	% of resource impacted by shadow (estimate)	Simulated time of impact (from shadow study)	New shadow impact
March 1	Observatory House, Building No. 2	50%	9:00 am	No adverse impact to principal façade of the built heritage resource – shade will only affect the southeastern portion. Impact is at peak at 9 am.
June 1	Prince of Wales Drive	25%	6:00 pm	The area adjacent to the Parking Garage will be fully shaded. Impact will begin at 6:00 pm and continue to sundown.
September 1	No impact	0%	No impact	No impact
December 1	Observatory House, Building No. 2	100%	9:00 am	Principal façade of the built heritage resource will be fully shaded. Impact is at peak at 9 am.
	Geophysical Laboratory Building, Building No. 3	50%	9:00 am	Principal façade of the built heritage resource will be fully shaded. Impact is at peak at 9 am.

Simulated date (from shadow study)	Impacted built heritage resource or cultural heritage landscape	% of resource impacted by shadow (estimate)	Simulated time of impact (from shadow study)	New shadow impact
	Prince of Wales Drive	25%	3:00 pm	The area adjacent to the Parking Garage will be fully shaded. Impact will begin at 3:00 pm and continue to sundown.

7.2.2 Impact to Views

Given the scale of the Project and the multiple views identified for the CEF NHSC and Rideau Canal NHSC/WHS, Golder requested that the potentially affected views be digitally modelled in three-dimensions following guidance suggested in the *Guidelines for Landscape and Visual Impact Assessment* (LI & IEMA 2013:148) and recently applied for World Heritage Sites in the United Kingdom, such as Caernarfon Castle (Johnston 2020). The identified views modelled for analysis are listed in Table 5 and illustrated in APPENDIX D.

Table 5: Analysis of identified views potentially affected by the Project

Place	Identified View ¹	Affected/ Unaffected	Modelled View #
CEF NHSC The Arboretum and Ornamental Gardens	the scenic outlooks from the arboretum ring road to Dow's Lake, the Rideau Canal, Carleton University and towards downtown Ottawa	Affected (scenic outlooks from the arboretum ring road to Dow's Lake)	View 1a
	the view from Prince of Wales Drive into the arboretum and ornamental gardens	Affected	View 2
	the view south, sloping gradually downhill, within the ornamental gardens	Unaffected	N/A
	views west towards the Farm from the other side of the Rideau Canal, Colonel By Drive and Dow's Lake, as well as the views from below the arboretum terraces up the slope	Affected	View 4a (west towards the Farm from the other side of the Rideau Canal), View 4c (Colonel By Drive and Dow's Lake)

Place	Identified View ¹	Affected/ Unaffected	Modelled View #
			View 4d (views from below the arboretum terraces up the slope)
	the view looking north from Prince of Wales Drive to the green barn (Building 82, formerly used for dehydrating plant samples) on the east side of the road	Affected	View 5
	the views from the Fletcher Wildlife Gardens to Hartwell's Lockstation	Unaffected	N/A
	the view of the Macoun Memorial Garden from the Driveway	Unaffected	N/A
	the view north from the bend on Prince of Wales Drive across the fields	Unaffected	N/A
CEF NHSC Historic Values of the Cultural Landscape	the view of the Main Dairy Barn from the east and the west, emphasizing its landmark quality	Unaffected	N/A
	the view west along the Driveway, with its closed canopy allée of trees	Unaffected	N/A
	the view north across the lawn to the Saunders Building; and their associations with key figures in the development of Canadian agriculture, such as William Saunders, Charles Saunders, and Sir John Carling	Affected	View 10
CEF NHSC Experimental fields, plots and shelterbelts	the view from the corner of Baseline and Fisher, looking northeast to the central core, with the Booth barn complex in the foreground	Unaffected	N/A

Place	Identified View ¹	Affected/ Unaffected	Modelled View #
	the view southwest from Carling Avenue across the fields	Unaffected	N/A
	the framed view looking east from Fisher along Cow Lane	Unaffected	N/A
	the view from any point along the periphery into the open fields	Unaffected	N/A
Rideau Canal NHSC/WHS	two views of the CEF NHSC from the Rideau Canal NHSC/WHS facing west from the east side of Dow's Lake	Affected	View 13a, 13b
	Views north from Hartwells Lockstation	Affected	View 13c
	Views east from the Bronson Avenue Bridge	Affected	View 4b
Queen Elizabeth Driveway [Prince of Wales Drive] Cultural Landscape	View facing north when travelling northbound from the traffic circle intersection with the National Capital Commission Scenic Driveway	Affected	View 2
	View facing east then south when travelling east and southbound from Commissioners Park	Affected	View 13a

¹ As defined in the CEF NHSC CIS, Rideau Corridor Landscape Strategy or Queen Elizabeth Driveway SOS

7.2.3 Additional Considerations

As presented in Section 3.2.1.3, a CIS provides the key objectives to determine whether the resources of a national historic site are “not impaired or under threat”. To address the potential impacts of the Project to the CEF NHSC and Rideau Canal NHS/WHS, the objectives outlined in their respective CIS were also considered in Table 6 and Table 7

Table 6: Assessment of adverse impacts to the objectives for the designated place of the CEF NHSC

CIS Objectives for the CEF NHSC Designated Place	Impact Assessment	Summary of impact <i>without</i> mitigation	Summary of impact <i>without</i> mitigation
<i>the present boundaries and spatial balance of the Farm, which enhance understanding of the historic and on-going agricultural research function, are safeguarded, and maintained;</i>	As assessed in Table 3, the Project will alter the present boundaries and spatial balance of the Farm, primarily through encroaching on the areas north and east of the William Saunders Building. However, this encroachment is primarily to create parking areas, which will continue the current conditions as primarily open area.	Minor, irreversible and direct impact that is site-specific and permanent, and will occur continually over a long period of time.	By implementing the mitigation measures recommended in Section 7.4, there will be negligible, irreversible and direct impact that is site-specific and permanent, and will occur continually over a long period of time.
<i>the surviving 19th century landscape plan, including the core administration, scientific and farm buildings, plus the arboretum, lawns, ornamental gardens, and display beds, experimental fields, plots and shelterbelts, and circulation patterns set in a Picturesque composition, is safeguarded and maintained in accordance with recognized heritage conservation principles</i>	The Site and Project is within the "headquarters zone" established when the Sir John Carling Building and Annex were built 1967 and will not change the surviving 19 th century landscape plan.	No impact.	No impact.
<i>a sufficiently large area to carry out and support the scientific research function is maintained; the character of a "farm" as defined by fields, utilitarian buildings and circulation patterns is recognized</i>	The Project will not affect the ability of to maintain a sufficiently large area to carry out and support the scientific research function of the CEF NHSC as well as maintain its character as a "farm".	No impact.	No impact.
<i>the "farm within a city" remains sufficiently large to provide a contrast to the scale of urban development</i>	The Project will not affect the "farm within a city" nature of the CEF NHSC.	No impact.	No impact.
<i>the historic values of the designated place are communicated to the public</i>	The Project presents an opportunity to communicate the historic values of the designated place to the public.	Potential positive impact.	Potential positive impact should the TOH consider development of an interpretative program in the future.

Table 7: Assessment of adverse impacts to the objectives for the designated place of the Rideau Canal NHSC/WHS

Rideau Canal Character-Defining Element	Impact Assessment	Summary of impact <i>without</i> mitigation	Summary of impact <i>with</i> mitigation
<i>through navigation of the Canal system is maintained to help assure the preservation of the unique historical environment and safeguard the level one cultural resources</i>	The Project is outside and a distance from the 30-m buffer zone for the Rideau Canal NHSC/WHS.	No impact.	No impact.
<i>the cultural resources related to the military period are safeguarded according to Parks Canada's Cultural Resource Management [CRM] Policy.</i>	Not applicable.	No impact.	No impact.
<i>the existing manual mode of operation of locks, dams and weirs on the system is maintained.</i>	The Project is outside and a distance from the 30-m buffer zone for the Rideau Canal NHSC/WHS.	No impact.	No impact.
<i>the visual relationship between the Canal and the heritage landscape in the central core of Ottawa remains evident and intact</i>	The Project will not adversely affect the visual relationship between the Canal and the heritage landscape in the central core of Ottawa (see Section 7.2).	No impact.	No impact.
<i>the views and visual linkages which enhance the military character of the Kingston harbor landscape and portray the relationship between the fortifications, the harbor and the Canal remains evident and intact</i>	Not applicable.	No impact.	No impact.

Rideau Canal Character-Defining Element	Impact Assessment	Summary of impact <i>without</i> mitigation	Summary of impact <i>with</i> mitigation
<i>the heritage character of corridor shore-lands are safeguarded from inappropriate development or uses</i>	The Project is outside and a distance from the 30-m buffer zone for the Rideau Canal NHSC/WHS and does not represent an inappropriate development or use.	No impact.	No impact.
<i>the visual relationship between the Merrickville Blockhouse and the heritage landscape adjacent to the site remains intact</i>	Not applicable.	No impact.	No impact.
<i>the heritage character of those identified corridor communities are safeguarded</i>	Through demolition of the Annex, minor encroachment outside the headquarters zone, and minor change to views of the CEF NHSC from the Rideau Canal NHSC/WHS, the Project will impact the heritage character of the CEF NHSC, which is identified as a corridor community.	Minor, irreversible and direct impact that is site-specific and permanent, and will occur continually over a long period of time.	Negligible, irreversible and direct impact that is site-specific and permanent, and will occur continually over a long period of time.
<i>the landmarks, view scapes and natural ecosystem features of the Canal's islands, shore-lands and wetlands that are related to the construction of the Canal and which are part of the Canal's unique historical environment are safeguarded</i>	The Project is outside and a distance from the 30-m buffer zone for the Rideau Canal NHSC/WHS and will not affect the landmarks, view scapes and natural ecosystem features of the Canal's islands, shore-lands and wetlands that are related to the construction of the Canal.	No impact.	No impact.
<i>the level one historic values of the designated place are effectively communicated to the public</i>	The Project presents an opportunity, by its situation directly adjacent to the Rideau Canal NHSC/WHS, to communicate the level one historic values of the designated place to the public.	Potential positive impact.	Potential positive impact.

7.3 Results of Impact Assessment

The impact assessment for this CHIS has found that *without mitigation* the Project will potentially result in a variety of adverse impacts ranging in magnitude from negligible to major:

- a minor, irreversible and permanent adverse impact through alteration of the CEF NHSC
- a negligible, irreversible, and infrequent adverse impact through shadowing to two Recognized Federal Heritage Buildings (Observatory House, Building No. 2 and Geophysical Laboratory, Building No. 3)
- a minor, irreversible and permanent adverse impact through changes to existing views of the CEF NHSC from the Rideau Canal NHSC/WHS and of the William Saunders Building Recognized Federal Heritage Building from the south
- a minor, reversible, and frequent adverse impact to the CEF NHSC when Maple Drive is converted to use as the primary ambulance route
- risk of major, irreversible, and infrequent adverse impact to the South Azimuth Building when Maple Drive is converted to use as the primary ambulance route
- potential risk of major, irreversible, and infrequent adverse impact from land disturbances during construction and operation

However, with the mitigation measures provided in the following section, the overall effects of the Project will range from no impact to negligible adverse impact. The Site will remain publicly accessible and through use of landscaping treatments (see Recommendations) may serve to soften the visual intrusion of recent development on the north side of Carling Avenue on the CEF NHSC and Rideau Canal NHS/WHS. Additionally, as outlined in the Design Brief & Planning Rationale for the Project, any negligible effects that remain after mitigation will be outweighed by the positive social impacts associated with the Project as a healthcare facility.

7.4 Recommendations

To substantially reduce or remove the identified adverse impacts, Golder recommends that the TOH consider the following mitigation measures:

- Screen the Project on its east, west, and south borders using trees and other landscape elements to reduce the impact to existing views of the CEF NHSC from the Rideau Canal NHSC/WHS, Price of Wales Drive section of the Queen Elizabeth Driveway cultural landscape, and of the William Saunders Building Recognized Federal Heritage Building
 - All future site plan applications should include further study and detailed design to screen the Project's borders, taking cues from the existing vegetation and shelterbelts within the CEF and considering landscape treatments that reflect and protect the CEF's rural picturesque character and its values as a "farm within the city". This is particularly important for the Preston and Carling corner of the Site, as well as along Maple Drive, where tree conservation could assist in mitigating the effects of the Project on the pastoral edge of the farm. These screening efforts would ensure that even with its new use, the landscape would retain connections to its historic context.

- Other mitigations such as lowering the heights of the proposed towers is disproportionate to the magnitude of impact to the adjacent built heritage resources and cultural heritage landscapes given its peripheral location northwest of Dow's Lake
- To remove the risk for construction-related impacts:
 - Conduct precondition surveys of all Federal Heritage Buildings adjacent to the Site
 - Implement site control and communication
 - Clearly marked on Project mapping the location of all adjacent Federal Heritage Buildings and communicate this to project personnel prior to mobilization.
 - Create physical buffers
 - Erect temporary fencing or physical barriers at the work area boundaries to prevent accidental collision with the adjacent Federal Heritage Buildings
 - Manage fugitive dust emissions
 - Draft a fugitive dust emissions plan following practices outlined in the *Ontario Standards Development Branch Technical Bulletin: Management Approaches for Industrial Fugitive Dust Sources (2017)*.
 - Monitor for vibration impact during adjacent construction
 - Conduct ground vibration monitoring at the work area boundaries and/or adjacent Federal Heritage Buildings. The monitoring should use a digital seismograph capable of measuring and recording ground vibration intensities in digital format in each of three (3) orthogonal directions. This instrument should also be equipped with a wireless cellular modem for remote access and transmission of data.
 - The installed instrument should be programmed to record continuously, providing peak ground vibration levels at a specified time interval (e.g., 5 minutes) as well as waveform signatures of any ground vibrations exceeding a threshold level that would be determined during monitoring (e.g., between 6-12 mm/s). The instrument should also be programmed to provide a warning should the peak ground vibration level exceed the guideline limits specified. In the event of either a threshold trigger or exceedance warning, data would be retrieved remotely and forwarded to designated recipients.
 - If vibration has exceeded the guideline limits specified, a stop work order should be issued immediately and the adjacent Federal Heritage Buildings promptly inspected for any indication of disruption or damage. If identified, the evidence of disturbance or damage should be documented, then closely monitored during construction for further change in existing conditions. Once work is complete, a post-construction vibration monitoring report or technical memorandum should be prepared to document the condition of the heritage attributes of the properties listed above and recommend appropriate repairs, if necessary.
- Install non-visually intrusive bollards on the northwest, west, and southwest sides of the South Azimuth Building (Building No. 8) to remove the risk of collision by an emergency vehicle (see Government of Ireland 2011:197)

- As much as is practicable, limit use of de-icing salts in the vicinity of the South Azimuth Building (Building No. 8) and periodically monitor the condition of the building's masonry for impact from salt damage. In the event damage is noted, take immediate action such as treating the masonry with a salt repellent or switch to a calcium or magnesium chloride product (see Graham & Snow 2017). This would need to be coordinated with AAFC to review existing practices used today.

8.0 SUMMARY STATEMENT

Following applicable federal, provincial, and municipal guidance combined with analysis of research sources, field investigations, shadow studies, and three-dimensional view modelling, this CHIS has assessed the potential impacts of the Project on the CEF NHSC, adjacent Federal Heritage Buildings and cultural landscapes, and the Rideau Canal NHSC/WHS. It has determined that without mitigation the Project will potentially result in a variety of adverse impacts ranging in magnitude from negligible to major, which are summarized in Section 7.3. To avoid or reduce these adverse effects, Golder has recommended that the TOH implement a number of conservation or mitigation strategies, outlined in Section 7.4.

If the TOH commits to implement these mitigation strategies, Golder recommends that the City:

- ***approve the Project as currently proposed.***

9.0 AUTHOR QUALIFICATIONS



Henry Cary, Ph.D., CAHP, RPA

Senior Cultural Heritage Specialist/ Senior Archaeologist

PROFESSIONAL SUMMARY

Dr. Henry Cary has over 20 years public and private-sector experience directing projects in diverse environments across southern and northern Canada. His interest to pursue a career in cultural heritage and archaeology began while a historical interpreter at Fort George National Historic Site, and his first employment as an archaeologist was as a co-op student with Parks Canada. While completing his master's degree Henry joined Parks Canada as project archaeologist for the Fort Henry National Historic Site Conservation Program and served as a member of the Rideau Canal UNESCO Nomination Team. His later PhD dissertation explored the work of the Royal Engineers at Fort Henry and the Kingston Fortifications National Historic Site. In 2010, Henry transferred to Parks Canada's Western Arctic Field Unit based in Inuvik and in addition to leading the logistics and terrestrial archaeology for the HMS *Investigator* Rediscovery Project, contributed to management planning for Aulavik, Ivvavik, and Tukut Nogait National Parks as well as defining the designated place for the Fort Franklin/Deline Fisheries National Historic Site. He then served as Heritage Manager for the Town of Lunenburg UNESCO World Heritage Site, which included authoring a management plan for the Lunenburg Academy National Historic Site.

Since joining Golder, Henry has produced heritage evaluations, impact assessments and conservation plans for a wide range of properties in southern Ontario, from a pre-War of 1812 stone house in Niagara to the 1914-23 Ottawa New Edinburgh Club Boathouse, and multiple properties in urban heritage conservation districts and character areas. Henry is licenced to conduct archaeological fieldwork in Ontario (P327), and a member of the Canadian Association of Heritage Professionals (CAHP) and Register of Professional Archaeologists (RPA). He is also an Adjunct Professor at Saint Mary's University, and currently a McCain Postdoctoral Teaching Fellow at Mount Allison University.

EMPLOYMENT HISTORY

Golder Associates Ltd.

Cultural Heritage Specialist / Archaeologist (2015–present)

Saint Mary's University – Halifax, Nova Scotia

Adjunct Professor, Department of Anthropology (2014–present)

Education

Ph.D., War Studies Programme (Military History & Architecture), Royal Military College of Canada, Kingston, Ontario, 2013

M.A., Historical Archaeology, Department of Anthropology, Memorial University, St. John's, Newfoundland, 2004

Combined Honours B.A. (with distinction), Department of Sociology & Anthropology/ and Department of Archaeology & Classics, Wilfrid Laurier University, Waterloo, Ontario, 2000

Certifications

Canadian Association of Heritage Professionals (CAHP)

Registered Professional Archaeologist (RPA)

Ministry of Transport Ontario RAQs-approved for Archaeology/Heritage

Province of Ontario Licence to Conduct Archaeological Fieldwork, Professional Class, No. P327.

Parks Canada Research Permits, 2002-2012, 2015-2016

Certificate in Project Management, Department of Continuing Studies, Dalhousie University, 2014

Mount Allison University – Sackville, New Brunswick

Lecturer, Department of Anthropology (2016-present)

CH2M HILL – Calgary, Alberta

Archaeology Field Manager (2014–2015)

Town of Lunenburg – Lunenburg, Nova Scotia

Heritage Manager, Corporate Services (2012–2014)

Parks Canada Agency – Inuvik, Northwest Territories

Field Unit Archaeologist/Historian, Western Arctic Field Unit (2009–2012)

Ground Truth Archaeology/ Past Recovery Archaeological Services/ Cataract Archaeological Research Foundation – Kingston, Ontario

Archaeological survey and mapping services (part-time) (2005–2009)

Parks Canada Agency – Cornwall, Ontario

Project Archaeologist, Ontario Service Centre (2002–2009)

Parks Canada Agency – Cornwall, Ontario

Assistant Archaeologist, Ontario Service Centre (1998, 1999)

RELEVANT EXPERIENCE

Heritage Conservation Statement & Cultural Heritage Impact Statement – Ottawa New Edinburgh Club (ONEC) Boathouse Recognized Federal Heritage Building

City of Ottawa, ON

Discipline lead and technical reviewer for a heritage conservation statement and cultural heritage impact statement to support rehabilitation of the Ottawa New Edinburgh Club (ONEC) Boathouse, a Recognized Federal Heritage Building on the Ottawa River owned by the National Capital Commission. The conservation statement recommended a series of rehabilitation actions based on the *Standards & Guidelines for the Conservation of Historic Places in Canada* while the assessment considered the impacts of the proposed rehabilitation on the building's character-defining elements. The studies involved field documentation and analysis of the structural history as well as extensive consultation with stakeholders.

Cultural Heritage Assessment Report – Baseline Road Bus Rapid Transit Corridor

City of Ottawa, ON

Discipline lead and technical reviewer for a cultural heritage assessment report as part of an environmental assessment for an extensive transit corridor with 25 new stations. The assessment considered the impacts of the proposed project on the heritage values of the Greenbelt, the Central Experimental Farm National Historic Site, and Rideau Canal National Historic Site, and recommended a detailed list of conservation and mitigation

measures based on provincial and federal guidance. The report was accepted as comprehensive by the City, NCC, and Parks Canada.

Cultural Heritage Impact Assessments – Port Hope Area Initiative

Municipality of Port Hope, ON

Discipline lead and technical reviewer for multiple impact heritage impact assessments to support remediation of historic low-level radioactive waste in Port Hope. The assessments required field investigations, understanding of the properties' cultural heritage significance and local heritage polices, and consultation with Canadian Nuclear Laboratories to identify the potential impacts of the remediation work. The tasks also included coordinating research and reporting with junior staff and ensuring the deliverables followed provincial heritage impact guidance.

Battlefield of Fort George National Historic Site Remediation Project

Niagara-on-the-Lake, ON

Principal investigator and project manager for archaeological and cultural heritage services to support an unexploded ordnance (UXO) removal and soil remediation program undertaken by the Department of National Defence (DND) at a former rifle range and part of the Battlefield of Fort George National Historic Site. Project tasks included historical and policy analysis of the cultural landscape, developing a protocol for archaeological investigation in concert with UXO clearance, coordinating with environmental contractors, and extensive consultation with DND and Parks Canada.

Cultural Heritage Assessment – Desjardins Canal, Dundas

City of Hamilton, ON

Principal investigator and author as roster consultant for the City of Hamilton to conduct a heritage evaluation of the Desjardins Canal and associated features in the town of Dundas and Cootes Paradise. Built between 1827 and 1837, the Desjardins Canal was expanded and changed in course through the 19th century. The evaluation involved field landscape survey and mapping, determining the structural sequence, application of City of Hamilton heritage evaluation criteria to a large industrial site and cultural heritage landscape, addressing multiple stakeholder perspectives, and coordinating archival research and reporting with junior staff.

Cultural Heritage Evaluation – Glengrove Transformer Station, 2833 Yonge Street

City of Toronto, ON

Principal investigator and task manager as roster consultant for Hydro One Networks Inc. to conduct a heritage evaluation of the Glengrove Substation, a large electrical facility built in a Gothic Revival or “Collegiate Gothic” style in 1930. Reporting included field investigations to document the property and context, and extensive comparison with other Toronto substations. The evaluation followed the provincial standards and guidelines and assessing the property using both *Ontario Regulation 9/06* and *Ontario Regulation 10/06*.

Additional Memberships

Association for Industrial Archaeology
Canadian Industrial Heritage Centre
Chartered Institute for Archaeologists (Affiliate)
Council for British Archaeology
Council for Northeast Historical Archaeology (former Executive Board member)
Construction History Society
Fortress Study Group
Historic Farm Buildings Group
Landscape Survey Group
Ontario Barn Preservation
Society for Industrial Archaeology
Society for Post-Medieval Archaeology
Society for the Study of Architecture in Canada
The International Committee for the Conservation of the Industrial Heritage
Vernacular Architecture Forum
Vernacular Architecture Group

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APPENDIX A

**Heritage Character Statements &
SOS for the Adjacent Classified &
Recognized Federal Heritage
Buildings at the CEF NHSC**

Dominion Observatory

Classified Federal Heritage Building

Ottawa, Ontario



Exterior photo

(© (Department of Energy, Mines and Resources, 1992.))

Address : Central Experimental Farm National Historic Site, Ottawa, Ontario

Recognition Statute: Treasury Board Policy on Management of Real Property

Designation Date: 1992-12-10

Dates:

- 1902 to 1904 (Construction)

Event, Person, Organization:

- David Ewart, Chief Architect of the Department of Public Works (Architect)

Custodian: Natural Resources Canada

FHBRO Report Reference: 92-035

DFRP Number: 08625 00

Description of Historic Place

The Dominion Observatory is a symmetrical, two-storey, stone building that features a central, four-storey octagonal tower flanked by two "T"-shaped flat-roofed wings, which are oriented at a 15° angle away from the tower. In 1905, the one-storey transit house

was added to the western wing and housed the meridian circle telescope and transit instruments used to determine time, longitude and star positions. The tower, which is capped by a retractable copper dome and serves as the main entrance to the building, formerly housed the observatory's equatorial telescope. Located at the north edge of the Central Experimental Farm on a campus-like site bounded by Carling Avenue and Observatory Drive, the Dominion Observatory forms a picturesque ensemble with the South Azimuth building (1912) and the Photo Equatorial building (1914) which formerly played supporting roles in the Observatory's scientific endeavours. The designation is confined to the footprint of the building.

Heritage Value

The Dominion Observatory is a Classified Federal Heritage Building because of its historical associations, and its architectural and environmental values.

Historical value:

The Dominion Observatory is one of the best examples of the important historic theme of the advancement of pure and applied scientific research at the national level in Canada. Established to aid and improve the survey work of western Canada through the investigation and application of positional astronomy, the Observatory also served as a world-class centre for astronomical and geophysical research, and developed a national profile as the source of Dominion Observatory Official Time. The Dominion Observatory is one of four major public buildings constructed in Ottawa during the expansionist years of the Wilfrid Laurier government as part of Laurier's efforts to turn Ottawa into the –Washington of the north-, and heralded Ottawa's transformation from a lumber town to a capital city. Scientists of national standing directly associated with the observatory include its co-founders William Frederick King and Otto Julius Klotz, along with John Stanley Plaskett.

Architectural value:

The Dominion Observatory is an excellent example of an eclectic blend of Romanesque Revival and Edwardian Classicist styles. Carefully planned by the founding scientists, the functional design of the building's research facilities originally accommodated the requirements of a small scientific department and has proven to be adaptable to new uses. A very good example of David Ewart's work, the building successfully combined aesthetics with the original functional requirements, making it well-suited to both the scientific activities it housed, as well as fulfilling the government's desire for a building that would express the federal and national importance of the institution.

The Dominion Observatory has a principal public façade which features most of the decorative detailing, and a more functional façade which features the photographic laboratory's skylight and the curved projecting wall of the stairs which are direct expression of the building's functions. Constructed of the highest quality materials and craftsmanship, the public and functional facades of the building are unified by the masonry work, which is characterized by a rich and vibrant palette of colours and textures.

Environmental value:

Visually prominent by virtue of its distinctive design, massing, materials and location, the Dominion Observatory forms part of a harmonious ensemble that includes the South Azimuth building and the Photo Equatorial building, which together reinforce the picturesque character of the Central Experimental Farm. The Dominion Observatory is one Ottawa's most well-known and easily recognizable public buildings.

Sources:

Jacqueline Hucker, Dominion Observatory, South Azimuth and Photo Equatorial buildings, Ottawa, Ontario. Federal Heritage Buildings Review Office Report 92-35, 92-41, 92-42; Dominion Observatory, South Azimuth and Photo Equatorial buildings, Ottawa, Ontario, Heritage Character Statement 92-35, 92-41, 92-42.

Character-Defining Elements

The character-defining elements of the Dominion Observatory should be respected:

Its masterful, eclectic blend of the Romanesque Revival and Edwardian Classicist styles, excellent functional design, and exceptionally high quality materials and craftsmanship as manifested in: the symmetrical composition of the building which consists of the central, four-storey tower and two "T"-shaped wings, one of which also features the one-storey former transit house addition; the formal treatment of the principal south façade including the decorative detailing, which expresses the federal and national importance of the institution, in contrast to; the simpler, less elaborate treatment of the north façade which is a direct expression of the building's interior functions; the distinctive and vibrant exterior treatment which unifies the public and functional sides of the building and is characterized by a rusticated limestone base, rock-faced variegated Nepean sandstone walls, and contrasting smooth, red Sackville sandstone string courses and window and door surrounds; the tower's decorative, stone detailing including the foliated capitals which flank the main entrance and separate the windows of the tower's drum, the incised lettering and carved royal coat of arms above the main entrance, the stone brackets supporting the drum's balcony; the hemispherical copper dome which caps the tower; the decorative ironwork including the drum's balustrade; the large clock face at the center of the tower's drum which recalls the Observatory's former timekeeping function; the interior features that define the building's early federal government office character such as the pressed yellow brick, ceramic tile floors, moulded baseboards and paneled wood office doors with transom lights, as well as the original light fixtures.

The manner in which the building reinforces the picturesque character of the observatory's campus-like setting within the Central Experimental Farm, as evidenced in: its visual prominence owing to its distinctive design, massing, materials and location; its harmonious relationship with the South Azimuth and the Photo Equatorial buildings, which together form a picturesque ensemble.

Heritage Character Statement

Disclaimer - The heritage character statement was developed by FHBRO to explain the reasons for the designation of a federal heritage building and what it is about the building that makes it significant (the heritage character). It is a key reference document for anyone involved in planning interventions to federal heritage buildings and is used by FHBRO in their review of interventions.

The Dominion Observatory was built in 1902-04 to the designs of David Ewart, Chief Architect of the Department of Public Works from 1896 to 1914. The South Azimuth building (1912) and the Photo Equatorial building (1914) are related structures. The observatory is now occupied by the Geological Survey of Canada. Energy, Mines and Resources is the custodial department. See FHBRO Building Report 92-35, 92-41 and 92-42.

Reasons for Designation

The Dominion Observatory and its associated structures were designated Classified because of the architectural and historical significance of the ensemble, and also for environmental reasons.

One of four major public buildings constructed in Ottawa during the expansionist years of the Wilfrid Laurier government, the Dominion Observatory possesses a vibrancy not found in other Ottawa federal buildings of this period. Because it was intended to stand on Parliament Hill, the building was personally designed by Chief Architect Ewart. A masterful blend of Romanesque Revival and Edwardian Classicism, the design combines references to institutes of higher learning with a contemporary taste for grandiloquent classical buildings with interesting domes. The South Azimuth building and the Photo Equatorial building, which played supporting roles in the observatory's scientific endeavours, were given the same elaborate exterior treatment.

Historically, the observatory embodies the theme of pure and applied research at the national level, recalling the role of astronomy in the survey of western Canada and world class work in astronomy and geophysics, as well as a national profile as the source of Dominion Observatory Official Time. Scientists of national standing directly associated with the observatory include William Frederick King, Otto Julius Klotz and John Stanley Plaskett.

The intrinsic value of the three buildings is enhanced by the integrity of their campus-like setting and the harmonious relationship with the surrounding Central Experimental Farm.

Character Defining Elements

The heritage character of the Dominion Observatory resides in the building's masterful marriage of aesthetics and functional requirements, and in the robust materials, colours and textures that distinguish its exterior. Smooth red Sackville sandstone provides a strong contrast to the rock-faced variegated Nepean sandstone walls, boldly outlining the windows and doors and running in uninterrupted string courses around the building.

Copper and decorative ironwork provide additional visual interest.

The four-storey tower is the architectural and scientific focus of the building, accommodating the main entrance as well as the 13 foot diameter pier which once supported the telescope. It possesses the lion's share of the building's ornamentation: foliated capitals flank the Romanesque entrance and separate the windows of the drum; incised lettering and a carved royal coat of arms surmount the entrance; a tightly packed line of brackets supports the drum balcony, which is encircled by a balustrade designed to match the ironwork of the Parliament buildings; and the large clock face at the center of drum recalls the observatory's former timekeeping function. The tower culminates in the retractable copper dome, which is still in good working order.

The tower anchors two flat-roofed wings with identical facades, creating a strong impression of symmetry and order that should not be compromised.

The observatory is relatively intact in its overall appearance, major interventions notwithstanding: an elevator shaft added in the 1960s projects through the roof behind the dome, two large chimney stacks have been removed, and windows and doors have been replaced with inappropriate metal units. Because the facade was so carefully designed, all of its features merit maintenance and preservation. The stone and copper work in particular require careful conservation. Consideration should be given to returning to windows matching the configuration seen in early photographs, and to alleviating the visual impact of the elevator shaft.

The interior is in excellent condition. The original layout, as well as features that define its early government office character - yellow brick walls, ceramic tile floors, moulded baseboards, original light fixtures and paneled office doors with transom lights - are intact and merit preservation. The removal of wrought iron railings from the curved staircase to accommodate the elevator shaft is unfortunate. The extant section of rail at top of stairs must be retained as a record of the original configuration.

The South Azimuth building and the Photo Equatorial building are constructed of the same materials as the observatory, and suffer from neglect. The buildings should be stabilized and features that recall their earlier scientific role preserved, such as the South Azimuth building's slate louvers and the stairs leading to the dome of the Photo Equatorial building.

The three buildings form a picturesque ensemble that harmonizes with the natural setting of the Experimental Farm. A 1946 aerial photograph illustrates the original sinuous circulation pattern, which is largely intact, as well as whimsical star-shaped flower beds that no longer exist. Management of the landscape should be in keeping with early patterns.

Ottawa, Ontario
Observatory House (Building #2)
Central Experimental Farm

HERITAGE CHARACTER STATEMENT

Observatory House was built in 1909 to a design by the Chief Architect's Branch of the Department of Public Works. Erected as a residence for the Dominion Chief Astronomer, it continued to be used for that purpose by a succession of Chief Astronomers until 1963, when it was converted to laboratory and office space. The building is currently occupied by the Geological Survey of Canada. Energy Mines and Resources Canada is custodian of the building. See FHBRO Building Report 92-36.

Reasons for Designation

Observatory House was designated Recognized because of its historical associations, the quality of its architectural design and its importance within its setting.

Observatory House is associated with the theme of Canadian research in astronomy and geophysics. Built in 1909 shortly after the construction of the Dominion Observatory, the building served as the official residence of the Dominion Chief Astronomer for many years, including William King, R.M. Stewart, and C.S. Beale, each of whom made significant contributions to the field. In addition to its residential function, magnetic survey work and other research were carried out in the building's basement laboratories.

In its design, Observatory House includes elements of the Queen Anne Revival and Classical Revival styles, resulting in a somewhat formal, but picturesque, overall appearance. The standard of craftsmanship and materials is high, particularly for the interior finishes and trim.

The site retains much of its early Edwardian landscape features and character, and the house is a distinctive feature in that area of the farm.

Character Defining Elements

The heritage value of Observatory House resides in its overall design, and in those aspects of its design and fabric which relate to its function as the residence of the Dominion Chief Astronomer. The quality of its extant interior historic finishes, and the character of its site plan and features, are also important heritage elements.

The building is a large and dignified two-and-one-half-storey structure, constructed in brick, with a stone foundation and wood shingle roof. The Queen Anne Revival style of

Ottawa, Ontario

Observatory House (Building #2) Continued

Central Experimental Farm

the late 19th century is evident in the picturesque aspects of its design, including its irregular eave lines, generous verandah around two elevations, slightly projecting entrance and the shingle finish in the gables.

Classical Revival style is also evident, largely in the general restraint of the design, the balanced arrangement of dormers, the classical columns, uniform windows, and centrally located ground floor entrance and hall. Despite minor alterations to the chimney, the porch, and the interior, the historic integrity of the building is high. Maintenance work should be carried out with matching materials in all cases to preserve the character of the building.

In the interior much historic detail and finish may be intact, but has been obscured by recent finishes such as floor tile and dropped ceilings. Significant interior finishes and features include the main and rear stairs, wood-and-leaded-glass windows, intact interior millwork and fireplaces. Early finishes and features should be identified and recovered as part of any future renovation.

Despite the construction of an out-of-scale parking lot at the front of the house, much of the character of the building's context survives. Much of the early landscaping scheme and detail elements survive, including garden paths, portions of the northwest fence, lawn, border plants and the willow tree. The present laboratory and office use makes heavy demands on the building. A less demanding use would permit a more appropriate development and appreciation of the building and site.

1994.01.13

92-37

Ottawa, Ontario

Geophysical Laboratory (#3)

Central Experimental Farm

HERITAGE CHARACTER STATEMENT

The Geophysical Laboratory was constructed to provide office and laboratory facilities for the Dominion Observatories Branch 1954-55. It was designed by Gilleland and Strutt, architects, who also designed the addition of another wing in 1960. The custodian is Natural Resources Canada. See FHBRO Building Report 92-37.

Reasons for Designation

The Geophysical Laboratory was designated Recognized because of its architectural importance, its environmental significance, and also for its historical associations.

The Geophysical Laboratory is an example of the International style as used for federal buildings during the mid-1950s. In keeping with this style, the massing consists of several components which reflect internal layouts. The rectilinear forms and materials have simple modern detailing and a variety of glazing types are present.

The Geophysical Laboratory is situated in the groomed park-like setting of the Observatory Campus. The style of the building provides a contrast to the older adjacent buildings, however its scale and materials are compatible.

The Geophysical Laboratory is associated with the second phase of work at the Dominion Observatory, dealing with gravity, geomagnetism and solar physics. Its construction reflects accelerated growth in these three fields of study and was part of a wave of government research buildings constructed around Ottawa. The building is associated with Dr. Morris J.S. Innes who was the director of the division developing specialized instruments for the field of geophysics.

Character Defining Elements

The heritage character of the Geophysical Laboratory resides in the building's form, its overall proportions and its International style details, its construction materials, surviving interior layout and finishes, and its relationship to the site and setting.

The building is a simple flat-roofed two storey "L" shaped structure. A two-and-a-half storey entrance block links the later sympathetic addition. The asymmetrical massing, consisting of blocks containing the entrance, an auditorium, and office/laboratories, is

.../2

Ottawa, Ontario

Geophysical Laboratory (#3) (cont'd)

distinguished by a variety of fenestration types expressing these diverse functions. This is typical of the International style and should not be altered.

The low form and horizontal emphasis of the building is emphasized by the brick walls with stone copings, stone sills, and stone surrounds with prominent vertical panels between windows. Regular inspection and maintenance of the masonry is recommended, particularly at the entrance parapet where water damage is evident.

The original design featured wood windows and doors, with the horizontal divisions of the windows reinforcing the horizontal emphasis of the facades. The current windows in aluminum have a lower horizontal line. When the windows and doors are at the end of their service life, they should be replaced with units that are compatible with the original design intent. The intended smooth lines of the International Style design are interrupted by air conditioners projecting through windows; this should be avoided, particularly on principal facades.

The metal detailing in the simple horizontal planes of the entrance canopies, the lettering and the cast ornament above the entrance are characteristic of the style and should be retained. Research should confirm if the upper guardrail over the entrance block is an early detail; depending on its vintage, it should be altered or removed as it appears to be contributing to masonry damage.

The original central corridor plan survives, as have the laboratory/office layouts. These should continue to be respected. The original interior finishes are largely extant and should be retained and incorporated into any new work.

The site has a simple manicured character that is appropriate to the building, however overgrown foundation planting should be minimized to maintain the prominence and clarity of the built forms. Site access and the footprint of the building are relatively unchanged and should be maintained. Stairs and handrails are simply detailed and compatible with the modern design.

95.07.31

For further guidance, please refer to the *FHBRO Code of Practice*.

92-38

Ottawa, Ontario

Machine Shop (No. 4)

Central Experimental Farm

HERITAGE CHARACTER STATEMENT

The Machine Shop was constructed as the Dominion Observatory Machine Shop before 1917. It is assumed to have been designed by the Chief Architect's Branch of the Department of Public Works. There were two significant alterations, one in the late 1940s which extended the basement and one in 1974 which created a side addition. The custodian is Natural Resources Canada. See FHBRO Building Report 92-38.

Reasons for Designation

The Machine Shop was designated Recognized because of its historical associations, its architectural value, and its environmental and local significance.

The building is associated with the establishment of the Geodetic Survey of Canada, and with the history of astronomical research and development as the design site for a number of advanced astronomical instruments. The building is also associated with J.S. Plaskett, an internationally known astrophysicist and astronomer.

The Machine Shop is an example of the modest traditional materials and details used for service buildings at the Experimental Farm. It is compatible with the present informal complex of buildings associated with the Observatory Campus.

Character Defining Elements

The heritage character of the Machine Shop resides in its form, materials, architectural details, surviving interior layout, and relationship to the site and setting.

The building is an "L" shaped one-storey structure with a truncated-hip roof and deep overhanging eaves. The simple massing and roof profile should be maintained. The rectangular proportions and the evenly spaced repetitive window rhythms should not be altered.

The red brick walls on a concrete foundation are simply accented by limestone window sills. The main entrance is protected by an overhanging wooden gable supported on decorative brackets. This feature should be maintained for its picturesque quality in an otherwise simple, utilitarian design.

.../2

Ottawa, Ontario

Machine Shop (No. 4) (cont'd)

Based on photographs, the original windows were two-over-two double hung units appropriate to the modest domestic scale of the building. The current windows consist of large glazing panels without vertical muntins. When the existing windows and doors are at the end of their service life, they should be replaced with units that are compatible with the original design intent.

The early layout responded to the functional requirements of a machine shop by providing two open rooms. This layout should be maintained if possible. Any surviving period finish materials should be identified and retained, and the utilitarian character of the spaces protected in any rehabilitation work.

The immediate site has been modified, with asphalt replacing the simply manicured landscaping. Further increases of the asphalted area should be resisted.

95.07.31

For further guidance, please refer to the *FHBRO Code of Practice*.

92-40

Ottawa, Ontario

Seismology Survey Building (#7)

Central Experimental Farm

HERITAGE CHARACTER STATEMENT

The Seismology Survey Building was constructed in 1913-14 to house the Geodetic Survey of Canada. It was designed by the Chief Architect's Branch of the Department of Public Works. The custodian is Natural Resources Canada. See FHBRO Building Report 92-40.

Reasons for Designation

The Seismology Survey building was designated Recognized because of its environmental and local importance and historical associations, and also for its architectural significance.

The Seismology Survey building is a component of the historic complex of early government buildings established around the Dominion Observatory at the Central Experimental Farm. The building is compatible with the present informal layout of adjacent buildings set in a mature treed landscape.

The building is associated with the establishment of the Geodetic Survey of Canada and with the history of seismological research and development. Its construction reflected the expansion of the federal role in pure and applied research to enhance the country's scientific and economic development. The construction of this building and of adjacent government office buildings also encouraged local city growth in the environs.

The Seismology Survey building is a good example of the Edwardian Classical style used for mid-sized governmental lab and office buildings of this era. The symmetrical facade and selective use of classical detail are characteristic of the style.

Character Defining Elements

The heritage character of the Seismology Survey Building resides in the building's form, Edwardian Classical proportions and architectural details, construction materials, surviving interior layout, and relationship to its site and setting.

The building is a flat-roofed three storey rectangular structure with a two storey extension. The elongated vertical proportions, symmetrically organized facades and

../2

Ottawa, Ontario

Seismology Survey Building (#7) (cont'd)

varied, repetitive window rhythms should not be altered. The height of roof top installations should be limited if possible to reduce their impact on the roof line with its distinctive metal cornice and shaped parapet.

The building composition reflects the classical tripartite division of base, body, and capital. Rough limestone accentuates the base, while smooth brick masonry is used for the body and copper defines the cornice. The brick walls with corner quoins are simply accented by red sandstone lintels, sills, string courses and entrance surrounds. These elements are in keeping with the Edwardian Classical style and should be maintained.

Based on early photographs, the original window design featured elongated double-hung units with transoms, with the top floor having semi-circular transoms and all windows having awnings. The current windows are of modern materials and have inappropriate muntin divisions. The semi-circular transoms are blocked, and there are air conditioning units located in some windows. When the windows are at the end of their service life, they should be replaced with units that are compatible with the initial design intent. Reinstatement of the awnings would cut cooling costs and enhance the heritage character of the building.

The layout, essentially a central corridor plan, has largely survived. The third floor has had minor modifications to some room layouts. The original layouts and patterns of use should be maintained. Original interior materials such as terrazzo flooring, marble stairs and woodwork should be preserved and incorporated into any rehabilitation of the interior.

The simply manicured landscape of walkways and grass is appropriate and should be maintained.

95.07.31

For further guidance, please refer to the *FHBRO Code of Practice*.

Photo Equatorial Building

Classified Federal Heritage Building

Ottawa, Ontario



Exterior photo

(© Department of Energy, Mines and Resources / Ministère de l'Énergie, des Mines et des Ressources, 1992.)

Address : Central Experimental Farm National Historic Site of Canada, Ottawa, Ontario

Recognition Statute: Treasury Board Policy on Management of Real Property

Designation Date: 1992-12-10

Dates:

- 1914 to 1914 (Construction)

Event, Person, Organization:

- David Ewart, Chief Architect of the Department of Public Works (Architect)

Other Name(s):

- Building No. 9 (Other Name)

Custodian: Natural Resources Canada

FHBRO Report Reference: 92-042

DFRP Number: 08625 00

Description of Historic Place

The Photo Equatorial Building, also known as Building No. 9, is a small, symmetrical, one-storey, stone building that features a rusticated stone base, a crenellated cornice, round glazed window openings, and stone brackets supporting a retractable copper dome. Located at the north edge of the Central Experimental Farm National Historic Site of Canada on a campus-like site bounded by Carling Avenue and Observatory Drive, the Photo Equatorial Building forms a picturesque ensemble with the Dominion Observatory (1902-04) and the South Azimuth building (1912). The designation is confined to the footprint of the building.

Heritage Value

The Photo Equatorial Building is a Classified Federal Heritage Building because of its historical associations, and its architectural and environmental values.

Historical value:

The Photo Equatorial Building is considered to be an extension of the Dominion Observatory due to the fact that it once played a supporting role in the Observatory's scientific endeavours and sheltered astronomical equipment. As such, it is one of the best examples of the important historic theme of the advancement of pure and applied scientific research at the national level in Canada. Established to aid and improve the survey work of western Canada through the investigation and application of positional astronomy, the Observatory also served as a world-class centre for astronomical and geophysical research, and developed a national profile as the source of Dominion Observatory Official Time. The Photo Equatorial Building was built specifically to house the observatory's stellar camera.

The Dominion Observatory is one of four major public buildings constructed in Ottawa

during the expansionist years of the Wilfrid Laurier government as part of Laurier's efforts to turn Ottawa into the –Washington of the north-, and heralded Ottawa's transformation from a lumber town to a capital city. Scientists of national standing directly associated with the Observatory include its co-founders William Frederick King and Otto Julius Klotz, along with John Stanley Plaskett.

Architectural value:

The Photo Equatorial is an excellent example of an eclectic blend of Romanesque Revival and Edwardian Classicist styles. Built to shelter astronomical equipment, the Photo Equatorial Building is an elegant, octagonal building that resembles an English Baroque tempietto. Constructed of the highest quality materials and craftsmanship, the Photo Equatorial Building is characterized by a retractable, hemispherical copper dome, and a rich and vibrant palette of stone including a rusticated limestone base, rock-faced variegated Nepean sandstone walls and dressed red Sackville sandstone quoins and window and doors surrounds.

Environmental value:

The Photo Equatorial Building reinforces the picturesque character of the campus-like setting of the observatory within the Central Experimental Farm, by virtue of its distinctive design and materials. An essential part of the harmonious ensemble that includes the Dominion Observatory and South Azimuth buildings, the Photo Equatorial Building has long been familiar to the residents of Ottawa as part of the Dominion Observatory campus.

Sources: Jacqueline Hucker, Dominion Observatory, South Azimuth and Photo Equatorial buildings, Ottawa, Ontario. Federal Heritage Buildings Review Office Report 92-35, 92-41, 92-42; Dominion Observatory, South Azimuth and Photo Equatorial buildings, Ottawa, Ontario. Heritage Character Statement 92-35, 92-41, 92-42.

Character-Defining Elements

The following character-defining elements of the Photo Equatorial Building should be respected.

Its eclectic blend of Romanesque Revival and Edwardian Classicist styles, excellent functional design, and extremely high quality materials and craftsmanship as manifested in: the form and symmetrical composition of the building; the distinctive and vibrant exterior treatment which is characterized by a rusticated limestone base, rock-faced variegated Nepean sandstone walls, and a contrasting smooth, red Sackville sandstone cornice and window and door surrounds; the building's crenellated stone cornice; the roof level's red Sackville sandstone base and brackets which support the retractable, hemispherical copper dome; and, the round glazed upper level windows.

The manner in which the building reinforces the picturesque character of the observatory's campus-like setting within the Central Experimental Farm, as evidenced in: its distinctive design, materials and location which contribute to the harmonious

relationship between the Dominion Observatory and South Azimuth Buildings as a picturesque ensemble.

Heritage Character Statement

Disclaimer - The heritage character statement was developed by FHBRO to explain the reasons for the designation of a federal heritage building and what it is about the building that makes it significant (the heritage character). It is a key reference document for anyone involved in planning interventions to federal heritage buildings and is used by FHBRO in their review of interventions.

HERITAGE CHARACTER STATEMENT

Dominion Observatory, South Azimuth Building and Photo Equatorial Building
Central Experimental Farm
Ottawa, Ontario

The Dominion Observatory was built in 1902-04 to the designs of David Ewart, Chief Architect of the Department of Public Works from 1896 to 1914. The South Azimuth building (1912) and the Photo Equatorial building (1914) are related structures. The observatory is now occupied by the Geological Survey of Canada. Energy, Mines and Resources is the custodial department. See FHBRO Building Report 92-35, 92-41 and 92-42.

Reasons for Designation

The Dominion Observatory and its associated structures were designated Classified because of the architectural and historical significance of the ensemble, and also for environmental reasons.

One of four major public buildings constructed in Ottawa during the expansionist years of the Wilfrid Laurier government, the Dominion Observatory possesses a vibrancy not found in other Ottawa federal buildings of this period. Because it was intended to stand on Parliament Hill, the building was personally designed by Chief Architect Ewart. A masterful blend of Romanesque Revival and Edwardian Classicism, the design combines references to institutes of higher learning with a contemporary taste for grandiloquent classical buildings with interesting domes. The South Azimuth building and the Photo Equatorial building, which played supporting roles in the observatory's scientific endeavours, were given the same elaborate exterior treatment.

Historically, the observatory embodies the theme of pure and applied research at the national level, recalling the role of astronomy in the survey of western Canada and world class work in astronomy and geophysics, as well as a national profile as the source of Dominion Observatory Official Time. Scientists of national standing directly associated with the observatory include William Frederick King, Otto Julius Klotz and John Stanley Plaskett.

The intrinsic value of the three buildings is enhanced by the integrity of their campus-

like setting and the harmonious relationship with the surrounding Central Experimental Farm.

Character Defining Elements

The heritage character of the Dominion Observatory resides in the building's masterful marriage of aesthetics and functional requirements, and in the robust materials, colours and textures that distinguish its exterior. Smooth red Sackville sandstone provides a strong contrast to the rock-faced variegated Nepean sandstone walls, boldly outlining the windows and doors and running in uninterrupted string courses around the building. Copper and decorative ironwork provide additional visual interest.

The four-storey tower is the architectural and scientific focus of the building, accommodating the main entrance as well as the 13 foot diameter pier which once supported the telescope. It possesses the lion's share of the building's ornamentation: foliated capitals flank the Romanesque entrance and separate the windows of the drum; incised lettering and a carved royal coat of arms surmount the entrance; a tightly packed line of brackets supports the drum balcony, which is encircled by a balustrade designed to match the ironwork of the Parliament buildings; and the large clock face at the center of drum recalls the observatory's former timekeeping function. The tower culminates in the retractable copper dome, which is still in good working order.

The tower anchors two flat-roofed wings with identical facades, creating a strong impression of symmetry and order that should not be compromised.

The observatory is relatively intact in its overall appearance, major interventions notwithstanding: an elevator shaft added in the 1960s projects through the roof behind the dome, two large chimney stacks have been removed, and windows and doors have been replaced with inappropriate metal units. Because the facade was so carefully designed, all of its features merit maintenance and preservation. The stone and copper work in particular require careful conservation. Consideration should be given to returning to windows matching the configuration seen in early photographs, and to alleviating the visual impact of the elevator shaft.

The interior is in excellent condition. The original layout, as well as features that define its early government office character - yellow brick walls, ceramic tile floors, moulded baseboards, original light fixtures and paneled office doors with transom lights - are intact and merit preservation. The removal of wrought iron railings from the curved staircase to accommodate the elevator shaft is unfortunate. The extant section of rail at top of stairs must be retained as a record of the original configuration.

The South Azimuth building and the Photo Equatorial building are constructed of the same materials as the observatory, and suffer from neglect. The buildings should be stabilized and features that recall their earlier scientific role preserved, such as the South Azimuth building's slate louvers and the stairs leading to the dome of the Photo Equatorial building.

The three buildings form a picturesque ensemble that harmonizes with the natural setting of the Experimental Farm. A 1946 aerial photograph illustrates the original sinuous circulation pattern, which is largely intact, as well as whimsical star-shaped flower beds that no longer exist. Management of the landscape should be in keeping with early patterns.

FHBRO Number 96-1 29

Ottawa, Ontario

Arc Biotech Building (Building No. 34)

Central Experimental Farm

The Arc Biotech Building was constructed in 1920 and received an addition in 1950 which almost doubled its size. The building's windows have been replaced. Its designer is unknown. Also called the Harry S. Gutteridge Building, the Arc Biotech Building originally served as headquarters for the Poultry Division building, and is now used to accommodate offices, a library, heavy laboratories for general Animal Genetics, and file storage in the attic. Agriculture and Agri-Food Canada is the custodian. The Arc Biotech Building is part of the Central Experimental Farm NHS. See FHBRO Case File No. 96-1 29.

Reasons for Designation

The Arc Biotech Building has been designated Recognized because of its historical associations, environmental significance and architectural qualities.

The Arc Biotech Building is closely associated with the development of the Experimental Farm system in Canada. In accordance with the Farm's 1886 mandate to introduce new and profitable farming methods to Canada, a Poultry Division was soon established in 1888. The Arc Biotech Building housed the offices and laboratories pertaining to this Division.

The building is named after Harry Stoneman Gutteridge, a scientist who spent almost his entire professional career in the Poultry Division. Mr. Gutteridge was first put in charge of Research in Poultry Nutrition, then was appointed Divisional Chief. During his stay, Mr. Gutteridge contributed to an increased application of scientific disciplines in solving the problems of a rapidly expanding and developing poultry industry.

The Arc Biotech Building is an important building belonging to the science and administration group of the central core. Its modest scale, chosen materials and detailing are typical of the smaller science and administration buildings built in the 1920's and 1930's at the Central Experimental Farm and help the building blend with the picturesque landscape. Ornamental shrub and tree plantings further enhance this overall character.

The building's vernacular character is visible in several architectural elements and details and is compatible with the picturesque aesthetic established on the site.

Character Defining Elements

FHBRO Number 96-1 29

Ottawa, Ontario

Arc Biotech Building (Building No. 34)

Central Experimental Farm

The heritage character of the Arc Biotech Building resides in its massing, scale, proportions, materials, architectural details, interior layout and finishes and in the relationship of the building to its setting.

The building consists of a two-and-a-half storey rectangular mass. Although the 1950 addition to the building's north side changed the original symmetry of the three bay façade with central entranceway, it integrates well with the building's original character. Window groupings and dormers accentuate the rhythmic, balanced proportions of the façades and reflect the building's interior layout.

The red brick walls, painted wood trim, high concrete foundations, pitched roof dormers and asphalt shingle roof contribute to the building's character and are in keeping with the overall architectural program for the farm. The addition's close brick match is a positive aspect worth noting. The ornamental eave dentils and the entrance topped by a transom window and projecting pediment with mock half-timbering are distinctive details. Subtle brick coursing patterns on the walls and mock half-timbering in the upper part of the dormers visually unite the building to many other buildings at the farm. All exterior features should be preserved through regular conservation maintenance and in any alterations or modifications. Also meriting protection is the visible demarcation between the original building and the addition, which gives evidence of the building's original composition.

An important feature was lost when the original multi-paned wood sash windows were replaced with aluminum windows with no muntin divisions. The remaining multi-paned windows in the building's main double, wooden doors are the only reminder of these former architectural elements and should be protected. When new windows are at the end of their service life, the building's heritage character would be enhanced by returning them to their former appearance.

Photographs from different periods show varying colour schemes for doors, trim and window frames. Paint analysis would help determine colour treatments for these elements.

The interior layout of the building is balanced, with rooms arranged off a central corridor, each having access to a set of windows. Any alterations to the interior should

respect this general plan. Interior finishes of value include the unpainted wood mouldings and flat plaster. Newer, dropped ceilings and fluorescent lighting detract from the quality and heritage character of the interior spaces and should be reconsidered when modifications are planned.

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Ottawa, Ontario

Arc Biotech Building (Building No. 34)

Central Experimental Farm

The ornamental shrubs, mature trees and turfgrass lawn adjacent to the Arc Biotech Building enhance its character and reinforce the picturesque qualities of this area of the Central Experimental Farm. Because the foundation was designed to be expressed and to admit light into the basement, shrub plantings should not be continuous along the façade to avoid obscuring a view of the foundation. The building's siting relates to the establishment of the second group of central core buildings, the science and administration buildings, on the north side of the Driveway Promenade.

For further guidance, please refer to the *FHBRO Code of Practice*.

1999.10.06

FHBRO Number 94-007

Ottawa, Ontario

William Saunders Building

Central Experimental Farm

The William Saunders Building was built in 1935 to the designs of Ottawa architect John Bethune Roper, to serve as the new Administrative Building for the Central Experimental Farm. There have been no significant alterations. The building currently houses the Centre for Land and Biological Resources Research. Agriculture Canada is custodian. See FHBRO Report 94-007.

Reasons For Designation

The William Saunders Building was designated Recognized for its architectural design, its environmental significance and its historical associations.

The William Saunders Building is a good example of the Collegiate Gothic style of architecture whose ordered planning and design imparts a calm monumentality to the building. This style, with its horizontal emphasis and use of medieval-derived detailing, was selected for numerous federal government buildings in Ottawa as part of the plan for the beautification of the national capital. The building's interior expresses this formal character with decorative finishes such as terrazzo floors with marble borders, and wood doors and trim.

The William Saunders Building's setting has not been significantly altered and it remains the dominant structure in its immediate open area. While it is slightly removed from the more public buildings on the Farm, the building's imposing style and prominent site contribute to its landmark status within the confines of the Farm community.

The William Saunders Building is directly related to the expansion of the Experimental Farm System as it reached the half-century mark. Responding to the increasingly diverse soil and climatic conditions encountered across the country, the Experimental Farm system expanded its research facilities in many recently settled areas, requiring greater research facilities and a centralized administration. The construction of the building, undertaken as part of the Public Works Construction Act of 1934, is also related to the creation of jobs by the federal government to alleviate unemployment during the 1930s.

FHBRO Number 94-007

Ottawa, Ontario

William Saunders Building

Central Experimental Farm

Character Defining Elements

The heritage value of the William Saunders Building resides in the quality of its architectural design and in its environmental integrity.

The William Saunders Building is a superior example of the Collegiate Gothic style of architecture built by the Department of Public Works. This style establishes the formal character of the building with its clearly ordered appearance and its fine use of stone detailing to highlight the monochromatic brick facing. The main facade is articulated by a central tower and projecting wings, and displays a Gothic treatment of buttresses, roof-top crenellation, oriel and bay windows. The belt course above the basement level, the moulded window hoods and surrounds, as well as the carved stonework of the entry, oriel window and coat of arms are typical of the Collegiate Gothic, and exhibit a superior level craftsmanship. Masonry conservation expertise should be consulted for any future repairs required to these elements. A number of the early multi-paned casement windows have been replaced, and the exterior metal storm windows, with their one-over-one sash design do not compliment the design intent of the building. At the end of their life, consideration should be given to the replacement of these windows with a more sympathetic design and material, based on historical precedent.

The William Saunders Building is the most prominent structure on the Farm's Main Lawn and its important status is easily distinguished from the nearby utilitarian greenhouses and early workers' residences. The landscaping around the building has matured, but essentially has remained the same. Any changes to the building or setting which detract from its relationship with the open front lawn should be avoided.

97.07.29

For further guidance, please refer to the *FHBRO Code of Practice*.

FHBRO Number 95-077

Ottawa, Ontario

Main Greenhouse Range (Building 50)

Central Experimental Farm

The Main Greenhouse Range (Building 50), a series of interconnected structures, was built in stages between 1915 and c.1967. The complex has had several designers: Pierson U-bar Company for the c.1915 range of greenhouses; the Department of Public Works under R.C. Wright for Greenhouse 11 (c.1923); and Lord and Burnham for the former Palm House, c.1938-39. Some of the post World War II pre-manufactured greenhouses may also have been supplied by Lord and Burnham. The east/west headerhouse, c.1960s, was designed by Burgess, McLean and MacPhadyen, Architects with the Department of Public Works under E.A. Gardiner. Modifications over the years reflect the functional needs of researchers, and include 1940s additions on the north and west sides, the 1960s additions on the south side of the complex, as well as the minor modifications to improve accessibility at the entrance to the former Palm House. The greenhouse ranges have maintained their original research function and now also accommodate public events. The building is a component of the Central Experimental Farm, a National Historic Site. Agriculture Agri-Food Canada is the custodian. See FHBRO Building Report 95-077.

Reasons For Designation

The Main Greenhouse Range (Building 50) has been designated Recognized because of its environmental significance and its architectural importance, as well as its historical associations.

The low scale and massing of the Main Greenhouse Range contribute to the park-like setting of the central core of functional, science and administration buildings, within the Central Experimental Farm. The overall relationship of the greenhouses to the adjacent buildings and open lawns remains largely unchanged. The prominent location of the greenhouses contributes to their familiarity among local visitors.

The Main Greenhouse Range is distinguished by its function-driven design and layout of greenhouses, headerhouses and utility units, and by its evolution over time to accommodate the changing needs of the plant research program. The majority of the complex is utilitarian and modular in design, varying only in wall heights and roof pitch, reflecting the simple building program and limitations of the steel, aluminum and glass construction. The pattern of metal mullions separating glazed panels in the roofs and walls adds visual interest and texture, while the complex's central octagonal-plan Palm House provides a major focus for the public side of the greenhouses located on the east side of the headerhouse.

These structures are directly associated with the Central Experimental Farm's role of

FHBRO Number 95-077

Ottawa, Ontario

Main Greenhouse Range (Building 50)

Central Experimental Farm

conducting research and disseminating results to farmers across the nation. They are also related to the Dominion-wide system of experimental farms used to promote the latest agricultural practices across Canada.

Character Defining Elements

The heritage character of the Main Greenhouse Range (Building 50) resides in its overall massing and evolutionary form, profile, construction materials and site relationships.

The massing of the Main Greenhouse Range is characterized by single-storey gable-roofed greenhouses attached perpendicularly to an “L” shaped spine of single-storey flat-roofed headerhouses. The massing, roof profiles and footprint reflect internal functions. The clarity of this expression should be respected. Character-defining features include the repetitive rhythms of the gabled roofs, the curved eaves, the two ogee-shaped roofs over the east entrances, and the generally consistent massing, scale and proportion of the greenhouses. The Palm House, an octagonal one-and-a-half storey hip-roofed greenhouse on the east side, is a focus of the massing.

The greenhouses are built on concrete foundations with partial-height concrete block walls, and consist of glass set within wood or metal frames. Details are characteristically simple, with the repetitive module, the scale of the vertical mullions and the character of the glazing providing pattern and texture. In contrast with the majority of the complex, the Palm House reflects a greater attention to detail, with its elegant radiused eaves, heavier wood framing with decorative profiles, and vestibule detailing which includes a simple cornice supported by pilasters, panelled and glazed wood entrance doors, and a radiating mullioned transom. A similarly detailed entrance vestibule is located on Greenhouse 11. The metal, wood and masonry materials should have a regular maintenance program. The modular design, relative transparencies of materials and strong rectangular patterns should be respected.

The functional interior planning of the complex is characterized by open, interior volumes and axial planning. Mechanisms related to the functioning of greenhouses and simple interior finishes such as headerhouse masonry walls, concrete floors and glazed walls and ceilings in the greenhouses contribute to the deliberately utilitarian, functional character. They should be maintained.

The character of the setting is appropriately park-like yet utilitarian, with a simple, manicured treatment of the surrounding turfgrass, perimeter walkways and minor foundation planting along the east side of the complex.

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Ottawa, Ontario

Main Greenhouse Range (Building 50)

Central Experimental Farm

For further guidance, please refer to the *FHBRO Code of Practice*.

2000.03.15

Ottawa, Ontario
Nutrition Building
Central Experimental Farm Bldg. No. 59

HERITAGE CHARACTER STATEMENT

The Nutrition Building was built in 1898-1899 as the Chemical Laboratory. The plans were prepared by the Chief Architect's staff of the Department of Public Works, under the direction of Thomas Fuller. The building was originally a simple rectangle. In 1913 a large wing was added to the east side of the building. In 1924, another large addition was constructed on the north side of the original building creating an L-shaped building. A one-storey brick addition was built around 1948, and another one-storey frame addition was added in the 1950s. The building is owned by Agriculture Canada. See FHBRO Building Report 91-1 70.

Reasons for Designation

The Nutrition Building was designated Recognized because of its historical association, its architectural and environmental significance.

The Nutrition Building is closely associated with the development of the Experimental Farms system in Canada. In accordance with its 1886 mandate to introduce new and profitable farming methods to Canada, a Chemistry Division, one of the four original divisions, was established in 1886. On its completion in 1899, all the experimental laboratories which serviced the various divisions of the farm were contained in the Chemical Laboratory (later named the Animal Nutrition Laboratory).

This building is closely associated with Frank T. Shutt, the Dominion Chemist from 1886 to 1932, who was awarded a prize from the American Society of Agronomy in 1929.

The Nutrition Building is a well-preserved example of the sturdy, functional type of building characteristic of the first thirty years of the CEF's history. The grounds of the building exhibit a "gardenesque landscape," a landscape style popular in the late 19th century. The building merges well into the natural landscape and the pastoral, semi-rural setting of this part of the CEF.

Character Defining Elements

The heritage character of the Nutrition Building resides in the massing, proportions, architectural details and materials of the 1898-1899 building and the 1913, 1924 and 1948 additions. The heritage character also lies in the relationship of the building to its setting.

.../2

Nutrition Building

Central Experimental Farm Bldg. No. 59 (Continued)

The building consists of a smooth red brick basically rectangular mass set on a well defined rock-faced limestone basement storey, and topped with a steeply pitched hip roof. Although numerous additions more than tripled the size of the original building, the additions were designed in a manner sympathetic to the original character of the exterior.

The roof is enlivened by triangular and shed dormers, and by prominent masonry chimneys. A boxed cornice with modillions and narrow frieze board accentuate the horizontal lines of the building. The formal west entrance is defined by a semi-circular masonry arch and is reached by exterior stairs. A secondary entrance is located on the south elevation. Multi-paned windows reflect the interior layout and contribute to the balanced composition of the elevations. Any changes in building use should attempt to retain the existing pattern of openings and access.

Care should be taken in maintaining the exterior finishes. The masonry should be regularly inspected. Major maintenance should be done by qualified conservators, using appropriate materials such as soft mortar, and proper repair and repointing techniques. Cleaning should be done only if required for conservation, and then with the least abrasive approach possible. Wood elements should be repaired rather than replaced, and repainted on a regular basis. Historic finish analysis can be used to determine the original colour scheme. The original doors should be preserved and repaired as required. Reinstatement of multi-paned wooden windows inspired from the original design would greatly enhance the aesthetic qualities of the building.

While interior spaces have been reworked many times in response to changing needs and demands it would be appropriate to identify any surviving interior layout and patterns of circulation, and incorporate these in any interior refurbishing. It would be desirable to create some continuity between the exterior and interior in terms of quality of finishes.

The landscape around the building which survives today is indicative of the "gardenesque landscape" style. Every effort should be made to maintain the relationship of the building to its site through the retention of the circular drive and the planting plan. Introduction of any new elements should respect the historic layout.

1992.05.06

FHBRO Number 92-110

Ottawa, Ontario

Heritage House, Building No. 60

Central Experimental Farm

Heritage House was constructed in 1889 by the Department of Public Works under the directorship of Thomas Fuller as a residence for senior personnel of the Central Experimental Farm. The building currently houses offices of Agriculture and Agri-Food Canada. The most significant alteration has been a single-storey addition built in 1955 off the west elevation. The Central Experimental Farm is a National Historic Site. Agriculture and Agri-Food Canada is the custodian. See FHBRO Building Report 92-110.

Reasons for Designation

Heritage House has been designated Recognized because of its architectural importance, its environmental significance and its historical associations.

A handsome and well-executed example of the Queen Anne Revival style of architecture, Heritage House displays a superior level of design and attention to detail and reflects the importance attributed to the mission of the Central Experimental Farm (CE F) by the federal government.

The structure is a prominent component of the CEF's complex of older buildings. The residential character of the building together with its pastoral setting reinforce the character of the Farm's picturesque core which is comprised of barns, display gardens, greenhouses, laboratory buildings and open green space. As one of the earliest surviving buildings on the Farm, Heritage House testifies to the crucial role of the federal government in the physical development of Ottawa.

Heritage House is strongly associated with the early years of the Central Experimental Farm, in particular with the prominent work of William and Charles Saunders. Each man contributed significantly to national and international agricultural developments when he resided in the building.

Character Defining Elements

The heritage character of Heritage House resides in the architectural features which associate the building with the Queen Anne Revival style of architecture, and the landscape elements which reflect the building's relationship with other buildings in the CEF complex.

The two-and-a-half-storey wood structure displays the irregular massing characteristic

FHBRO Number 92-110

Ottawa, Ontario

Heritage House, Building No. 60

Central Experimental Farm

of the Queen Anne Revival style. Each of the building's elevations is distinct: a projecting octagonal bay, a verandah and a one-and-a-half-storey gabled wing leading to a one-storey drive shed all contribute to the picturesque aesthetic which are typical of the style. This is reinforced by the highly complex roof structure with its variously styled projecting dormers, and by the very well executed ornamental wood cladding. The distinct and varied massing and facade design should be respected in any interventions to the building.

The visual interplay of textures displayed by various building materials is an important contributor to the heritage character of the building. This includes the wood shingled roof, the shaped shingle siding of the second floor and the clapboard siding of the ground floor. The verandah's elaborate scroll work and turned posts and the multi-paned design of the window sash form an integral part of Heritage House's picturesque aesthetic. The ongoing maintenance of these elements should be ensured, and interventions which would detract from the building's picturesque qualities should be avoided. The polychromatic effect of the current paint scheme is appropriate to the building's character and style. The modern replacement windows found in some openings lack the texture and design of the originals, and should be replaced with compatible units when they have reached the end of their life cycle.

The 1955 one-storey addition to the rear is utilitarian in design and detailing. This addition should remain distinct from the main structure in the treatment of its asbestos siding, windows and flat roof line.

While the interior of the building has been altered to accommodate a number of office spaces by the introduction of room dividers and dropped ceilings, a great deal of the interior's original finishes survives, including fine baseboard and window mouldings, doors and stairway details. The kitchen still displays its original tongue and groove boards on the walls and ceiling, and the brick chimney with its wood stove vent is intact. The removal of the room dividers and dropped ceilings should be considered in any future renovation to the building interior. Future developments should resist removal of early fabric or alteration of the residential character of the building's layout.

Heritage House's site retains much of its original features including the circular drive, open lawns and plantings. These plantings have now matured and provide a soft screening of the later Nutrition Building nearby (1902-03) and the parking lot at the rear

of the building, and reinforce the picturesque qualities of the site. Care should be taken that these elements are properly maintained, and that any removals or additional plantings do not detract from this picturesque character.

FHBRO Number 92-110

Ottawa, Ontario

Heritage House, Building No. 60

Central Experimental Farm

For further guidance, please refer to the *FHBRO Code of Practice*.

1999.07.23

Ottawa, Ontario
Horticulture Building / Botanical Laboratory
Central Experimental Farm, Building No. 74

HERITAGE CHARACTER STATEMENT

Building No. 74 of the Central Experimental Farm was built as a botanical laboratory and research center in 1924, to designs produced in the office of the chief architect of the Department of Public Works, R.C. Wright. It was more than doubled in size in 1929, using the same design vocabulary. It continues to serve as a research center, currently used by the Agro-Meteorology and Engineering Divisions. The custodial department is Agriculture Canada; the property is managed by Public Works Canada. See FHBRO Building Report 87-57.

Reasons for Designation

The Botanical Laboratory has been designated a Recognized heritage building because of its historical associations with the increasing scale and scope of the farm's activities and the changing, increasingly scientific approach toward agricultural disciplines in the 1910s and 1920s. It is of satisfying architectural design and contributes to the picturesque quality of its setting.

Character Defining Elements

The heritage character of this property is defined by the building's exterior, and by its siting.

The building is a subdued but attractive example of Queen Anne architecture, employing the decorative half-timbering and textural contrasts associated with the style. The foundation walls are of random coursed stone; the first storey is clad in brick, with some decorative treatment of the entryways; and the upper storey is stuccoed, with a contrasting half-timbered gable above the main entrance. The steeply pitched, gable hip roof was redone at the time of the expansion to create a unified appearance for the building. It is punctuated at regular intervals with flat-topped dormers. The various finishes and decorative treatments should be maintained, to preserve the rustic quality of the building.

The Botanical Laboratory is visually isolated from surrounding buildings, except for the unobtrusive greenhouses to the rear, by carefully manicured grounds on all sides. In light of the rural associations of the Queen Anne style, the character of the building and associated landscape can be seen as mutually enhancing. As far as possible, this relationship should be maintained, reflecting as it does the aesthetic vocabulary established at the farm over the years.

1988.06.29

SCHEDULE H

Annex Building Heritage Character Statement

FHBRO HERITAGE CHARACTER STATEMENT WEST ANNEX (CAFETERIA, SIR JOHN CARLING BUILDING), CENTRAL EXPERIMENTAL FARM, OTTAWA

FHBRO Number:	03-116	FINAL
DFRP Number:	54521	
Resource Name:	West Annex (cafeteria Sir John Carling Building)	
Address:	930 Carling Avenue, Ottawa, Ontario	
FHBRO Status:	Recognized Federal Heritage Building	
Construction:	Between 1963 and 1967	
Designer:	Hart Massey	
Original Function:	Cafeteria	
Current Function:	Vacant	
Modifications:	No major modification to existing materials or spaces. The West Annex was formerly attached to a central eleven-storey tower which was demolished in 2014, along with a three-storey wing.	
Custodian:	Publics Works and Government Services Canada	

Description of Historic Place

Situated between Carling Avenue and Prince of Wales Drive, the West Annex (cafeteria Sir John Carling Building) is located on the northeast side of the Central Experimental Farm (CEF). It was constructed as one of three distinct, inter-connected components of a complex, designed by notable Canadian architect Hart Massey, which housed the national headquarters of Agriculture and Agri-Food Canada. The central, eleven-storey office tower, and eastern, three-storey shipping and receiving wing have since been demolished, leaving the West Annex as the only remaining component. The West Annex has a low, rectangular design featuring three-hinged concrete arches which define the building's distinctive curved roof with upturned eaves. Between the prominently exposed concrete structural elements, vast expanses of glass enclose the interior space. At the north façade, and on portions of the east and west façades, the glazing is full-height; on the remaining exterior walls, glazing is restricted to clerestory windows positioned atop black granite panels. The roof structure, with its subtly tapered arches, allows for a large, open cafeteria area free from columns or other supports. The building is positioned on a high basement storey; the volume of the basement is clad in rough cut limestone, and built into the picturesque landscape. The link to the former main tower is still intact, though it no longer serves a connecting function.

Heritage Value

West Annex (Cafeteria Sir John Carling Building) is a 'Recognized' federal heritage building because of its historical associations, and its architectural and environmental values.

Historical value:

The Sir John Carling Building (SJCB) was created as the National Headquarters and Administration Building for the Department of Agriculture. It was also associated with the national theme of the post-war expansion and consolidation of federal government services, specifically with respect to Canada's national program of agricultural research. The West Annex, which housed the cafeteria, was a supporting structure to the overall objectives of the campus. The SJCB is also associated with the 1950 Gréber Plan for federal government campuses in the National Capital Region, developed by the Federal District Commission. As the sole remaining element of one such campus, the West Annex speaks to the expansion and subsequent decline in

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FHBRO HERITAGE CHARACTER STATEMENT WEST ANNEX (CAFETERIA, SIR JOHN CARLING BUILDING), CENTRAL EXPERIMENTAL FARM, OTTAWA

centralized, suburban headquarters. This decline is evident at the site of the West Annex, highlighted by the demolition of the Sir John Carling Building itself.

Architectural value:

As part of the Sir John Carling complex, and as a stand-alone building, the West Annex is a very good example of the work of Hart Massey. Though its visual impact may have been greater as a part of the complex, its significance as a structure is not diminished by its current state as an individual building.

The West Annex is a very good example of mid-20th century modernist architecture, reflecting the basic tenets of the International Style. The low single-storey, rectangular massing of the West Annex gives a strong horizontal emphasis, while the bold, elegantly curved roofline, and the reinforced concrete three-hinged arches lend expressive qualities to the building's form. A projecting concrete walkway cantilevers out over the recessed basement, further emphasizing horizontality in the design. The concrete arches, prominently visible both in and outside the building, is an expression of the West Annex's structure. The design of the arched roof precludes any need for columns or other supports, creating an unobstructed, highly functional interior space for gathering, conference room and food preparation facilities. The flat expanses of floor-to-ceiling glass which surround the dining area allow natural light into the main room, while clerestory windows serve to illuminate the south portion of the building.

The material palette of the West Annex has a modern aesthetic; materials used are of good quality, and exhibit good craftsmanship. For both the interior and the exterior, concrete and glass are the most prominent materials; on the exterior these materials are accented by aluminum mullions, black granite panels, and the rustic, coursed limestone cladding of the recessed base. The roof is composed of pre-cast concrete roof slabs which define its curved shape and upturned eaves; its arched, precast concrete arches are left visible from the interior. Oak trim is used as an interior finish.

Environmental value:

Situated within the Central Experimental farm, the West Annex, at present, occupies an open site near the crest of a hill covered by trees and brush. Though the demolition of the other buildings of the Sir John Carling Complex has profoundly altered the site, (notably with regards to circulation patterns) the dialogue between the West Annex and the landscape remains. Setback from adjacent streets, the West Annex is surrounded by an open park-like landscape. The building is compatible with the picturesque character of Dow's Lake, and has strong associations with the farm, the former campus, and the immediate landscape. The building is conspicuous in the neighbourhood, and the site is well known by local residents.

Character-Defining Elements

The character-defining elements of West Annex (Cafeteria Sir John Carling Building) that should be respected include:

Its modernist architectural expression, evident in:

- the low, rectangular single-storey massing with horizontal emphasis;
- bold structural concept, as demonstrated by elements such as the visible reinforced concrete three-hinged arches;
- distinctive, elegantly curved, projecting roofline with upturned eaves;
- its refined geometry;
- flat expanses of floor to ceiling glass;
- clerestory windows; and,

FEDERAL HERITAGE BUILDINGS REVIEW OFFICE
Indigenous Affairs and Cultural Heritage Directorate, Parks Canada
30 Rue Victoria, 3rd Floor, Gatineau, Quebec J8X 0B3
Tel.: 819-997-6965 / Fax: 819-953-4909 / Web site:
<http://www.pc.gc.ca/eng/progs/beefp-fhbro/index.aspx>

**FHBRO HERITAGE CHARACTER STATEMENT
WEST ANNEX (CAFETERIA, SIR JOHN CARLING BUILDING),
CENTRAL EXPERIMENTAL FARM, OTTAWA**

- projecting concrete walkway above the recessed base.

Its functional design, represented in its:

- open, flexible, well-lit interior space;
- uninterrupted interior space due to long span roof structure; and,
- exterior cantilevered walkway which acts also as supplementary dining space.

Its modern, good quality materials, including:

- exposed concrete arches with subtle tapering;
- concrete structure visible in and outside the building;
- precast concrete roof slabs;
- black granite panels on the facade;
- rustic, coursed limestone cladding;
- large expanses of glass with aluminium mullions;
- interior oak elements/features, wood trim; and,
- the use of stone, marble brick and copper.

Its contextual relationships, as evident in its:

- dialogue with the landscape, particularly in its compatibility with the picturesque character of Dow's Lake; and,
- conspicuous location within the Central Experimental Farm.

For guidance on interventions, please refer to the *Standards and Guidelines for the Conservation of Historic Places in Canada*. For further information contact FHBRO.

December 2017

APPENDIX B

Master Site Plan / Lifting of Holding
Zone: New Civic Development for
The Ottawa Hospital (March 31,
2021)

NEW CIVIC DEVELOPMENT FOR THE OTTAWA HOSPITAL

Master Site Plan / Lifting of Holding Zone

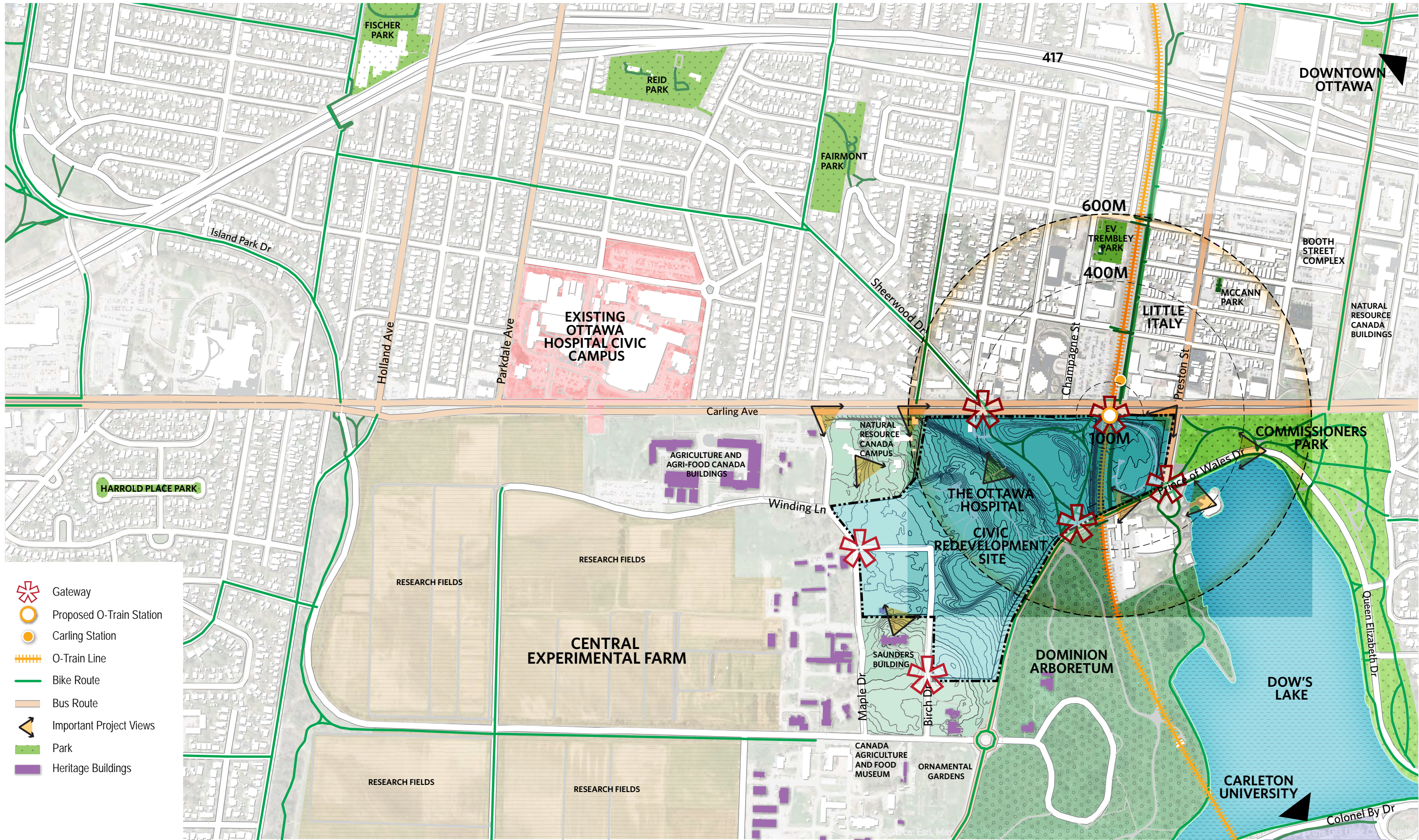
Hospital, Office, Ancillary Commercial / Services & Parking

930 Carling Avenue & 520 Preston Street, Ottawa, ON

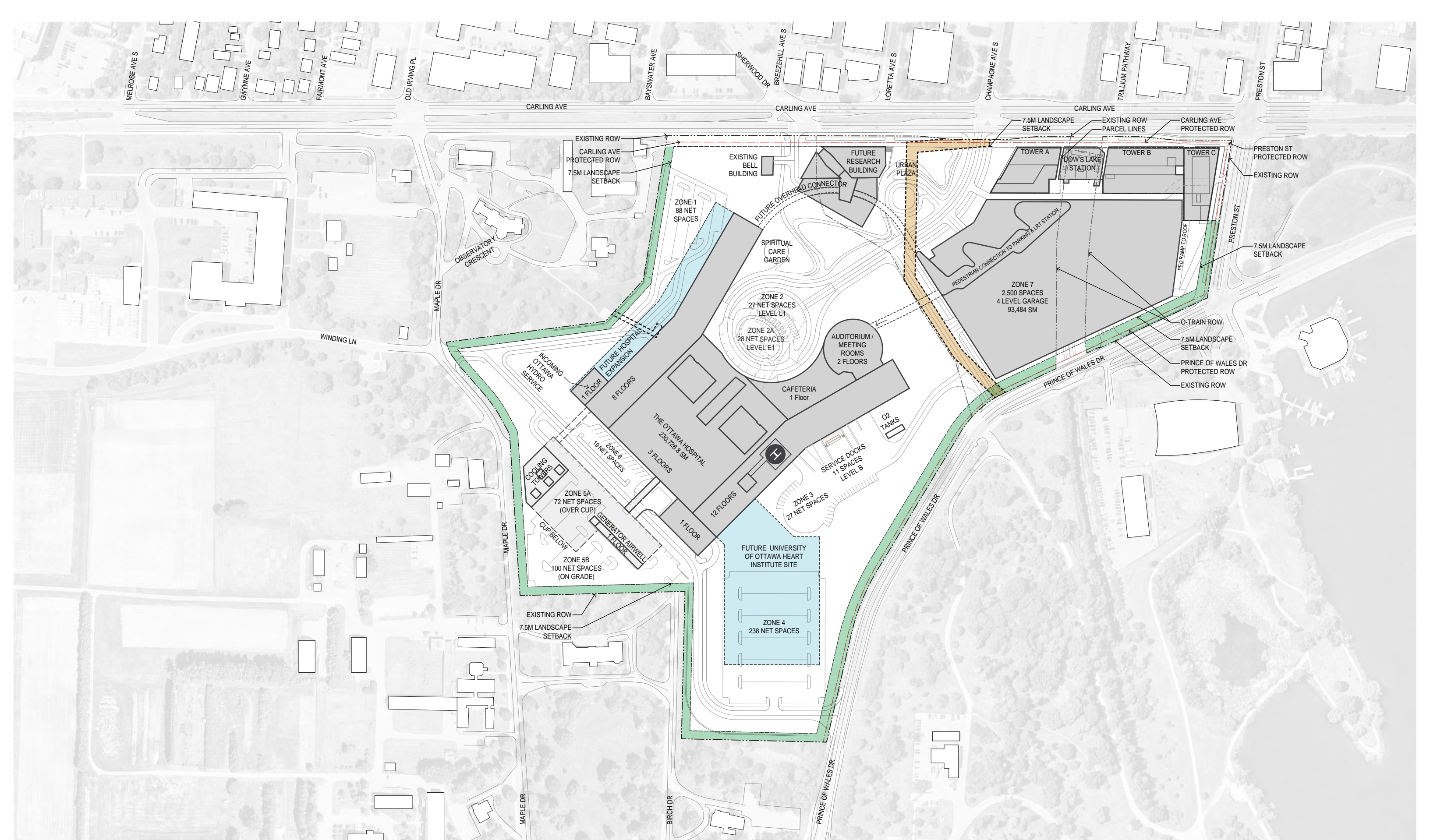
March 31, 2021

TABLE OF CONTENTS

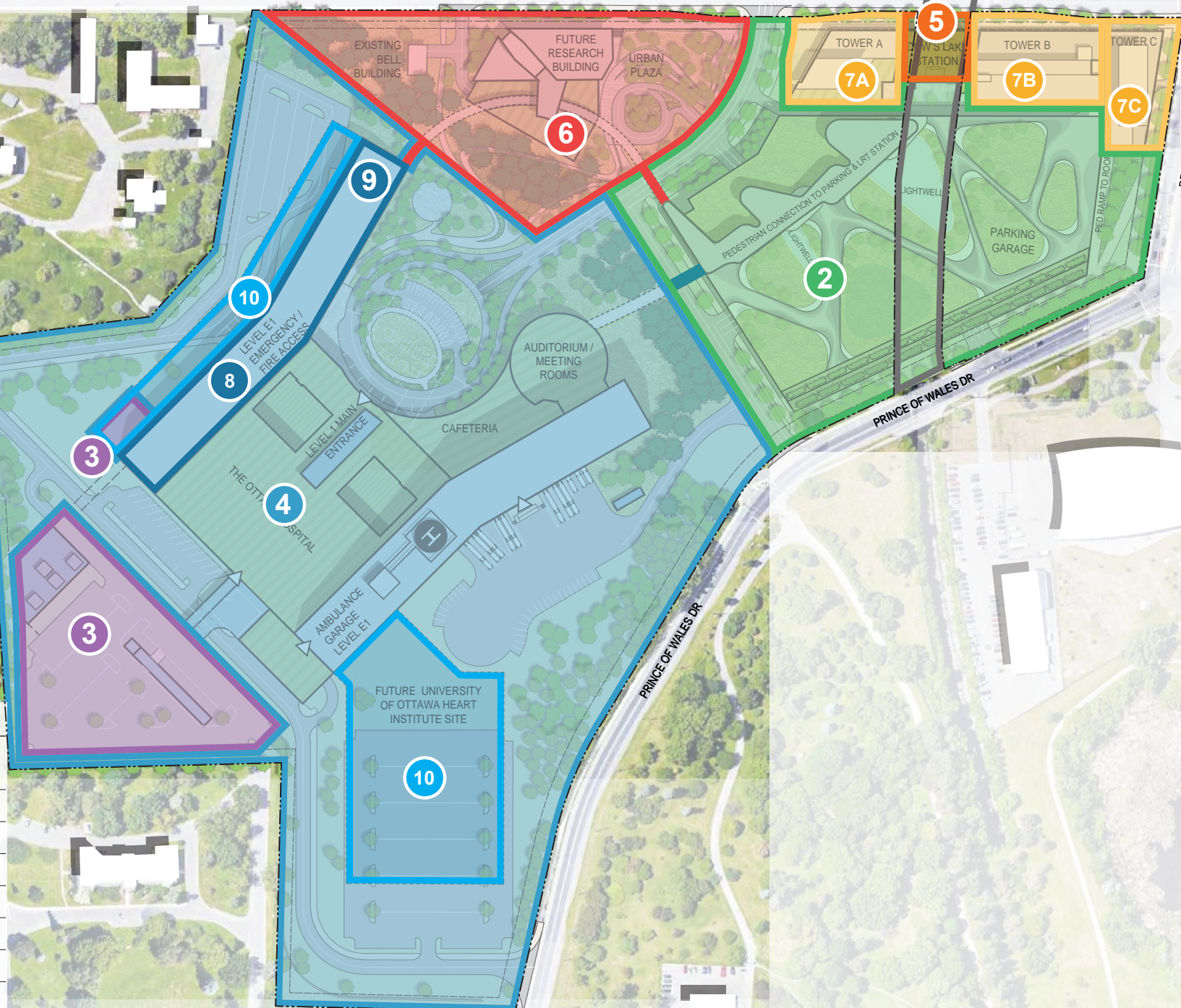
3	Context Plan
4	Master Site Plan
5	Master Phasing Plan
6	Open Space, Landscape, And Grading Concept
7	Conceptual Parking Garage Plans
11	Parking Garage Before Carling Avenue Tower Construction
12	Building Elevations
14	Building Cross-Sections
16	Building Interface And Public Realm
22	Massing Model Against Capacity
23	Views Analysis And Conceptual Renderings
31	Hospital Floor Plates
36	Topographical And Boundary Survey



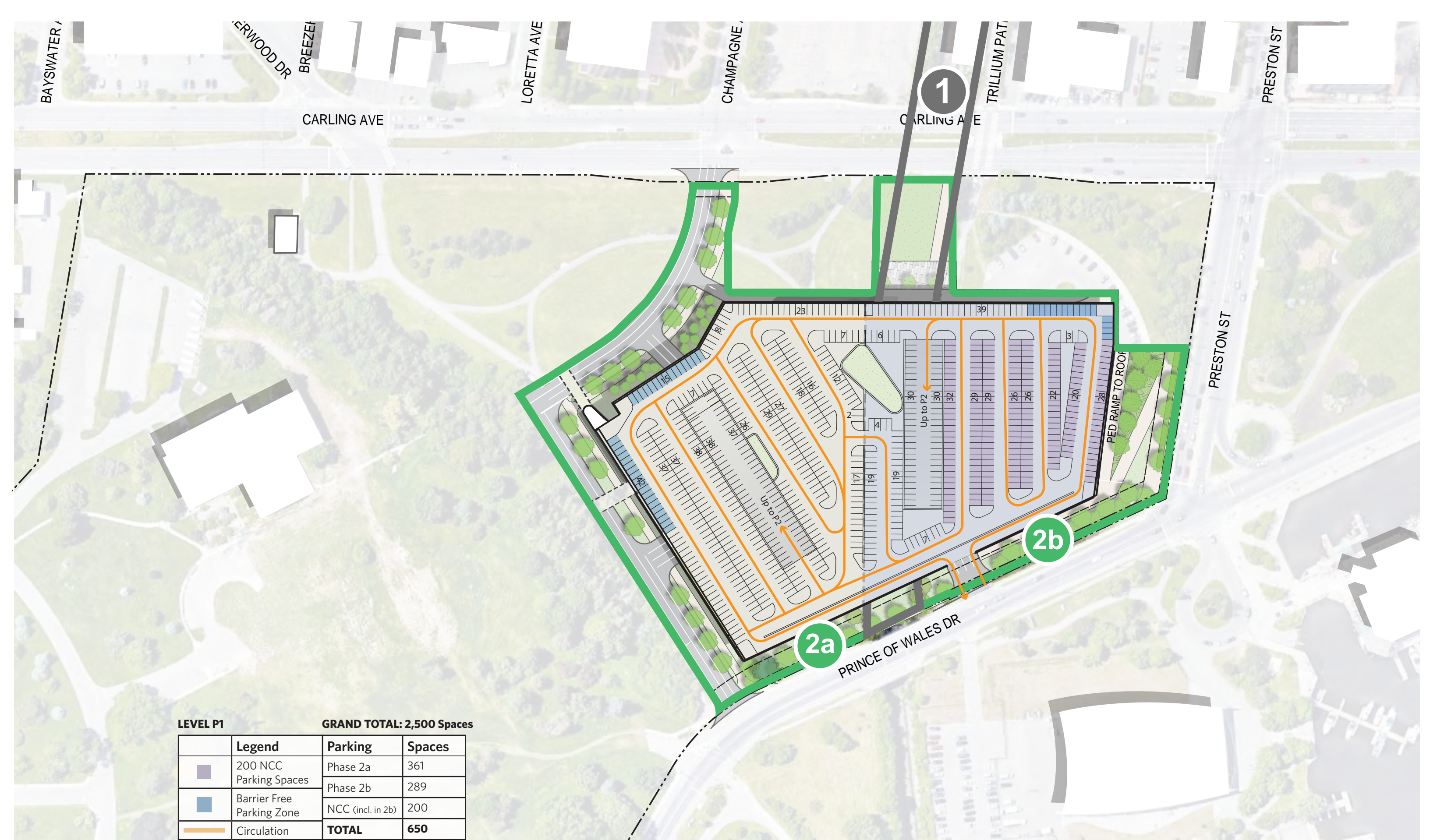
- Gateway
- Proposed O-Train Station
- Carling Station
- O-Train Line
- Bike Route
- Bus Route
- Important Project Views
- Park
- Heritage Buildings



Phase	Start / End Date	Project
1A	2021 - 2021	Existing LRT Station and Rail Trench Widening
1B	2021 - 2021	Jurisdictional Approvals
2	2022 - 2023	Parking Garage
3	2024 - 2026	New Hospital CUP & Hydro Service
4	2024 - 2028	New Hospital
5	2025 - 2027	LRT Station Expansion
6	2024 - 2029	Research Tower
7A	2029 - 2039	Carling Tower A
7B	2029 - 2039	Carling Tower B
7C	2029 - 2039	Carling Tower C
8	2024 - 2028	Rehab
9	2035 - 2038	New Hospital Expansion
10	2045 - 2048	New Hospital and UOHI Expansion

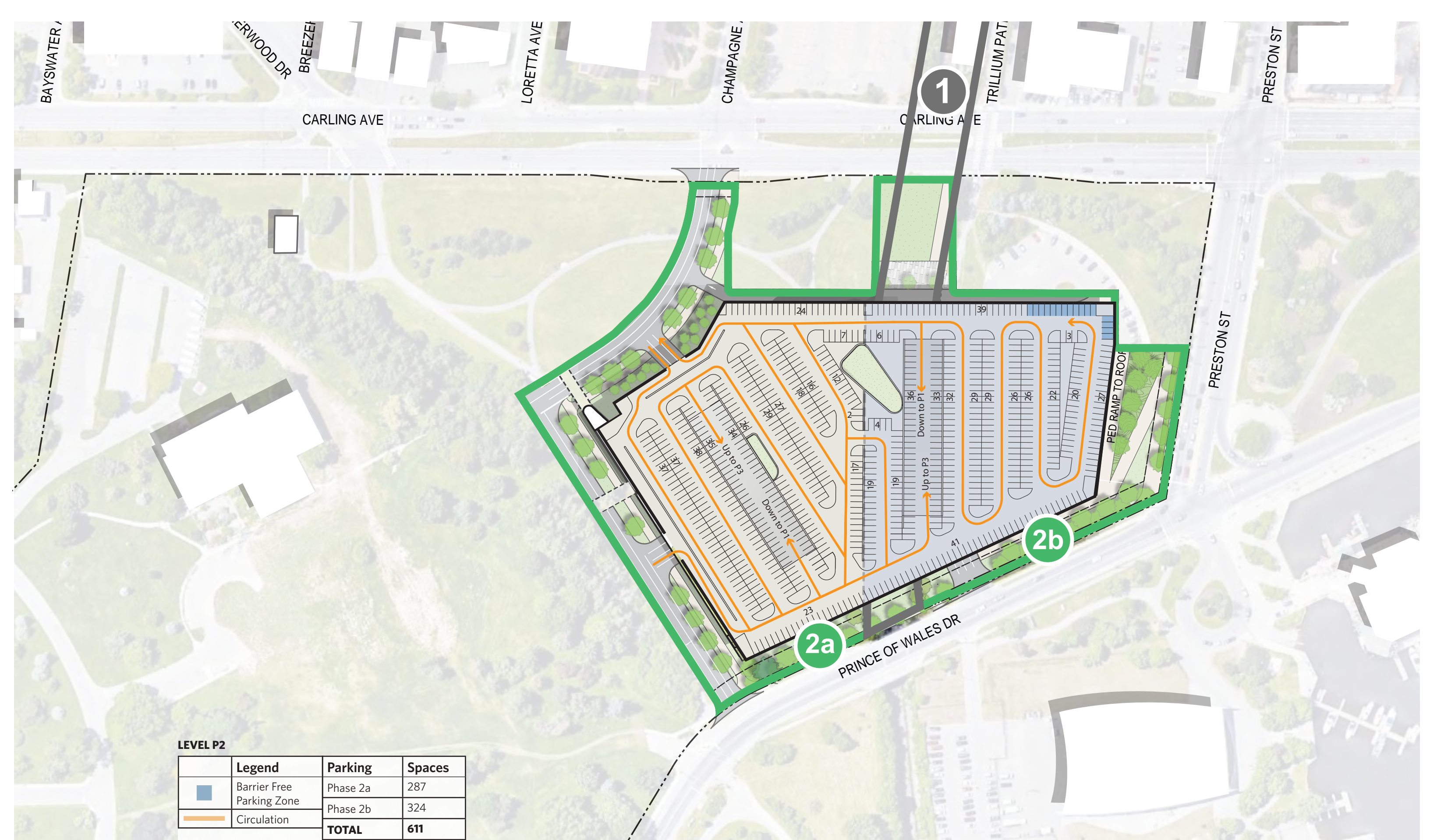






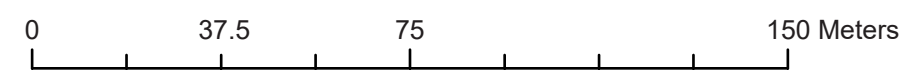
LEVEL P1 **GRAND TOTAL: 2,500 Spaces**

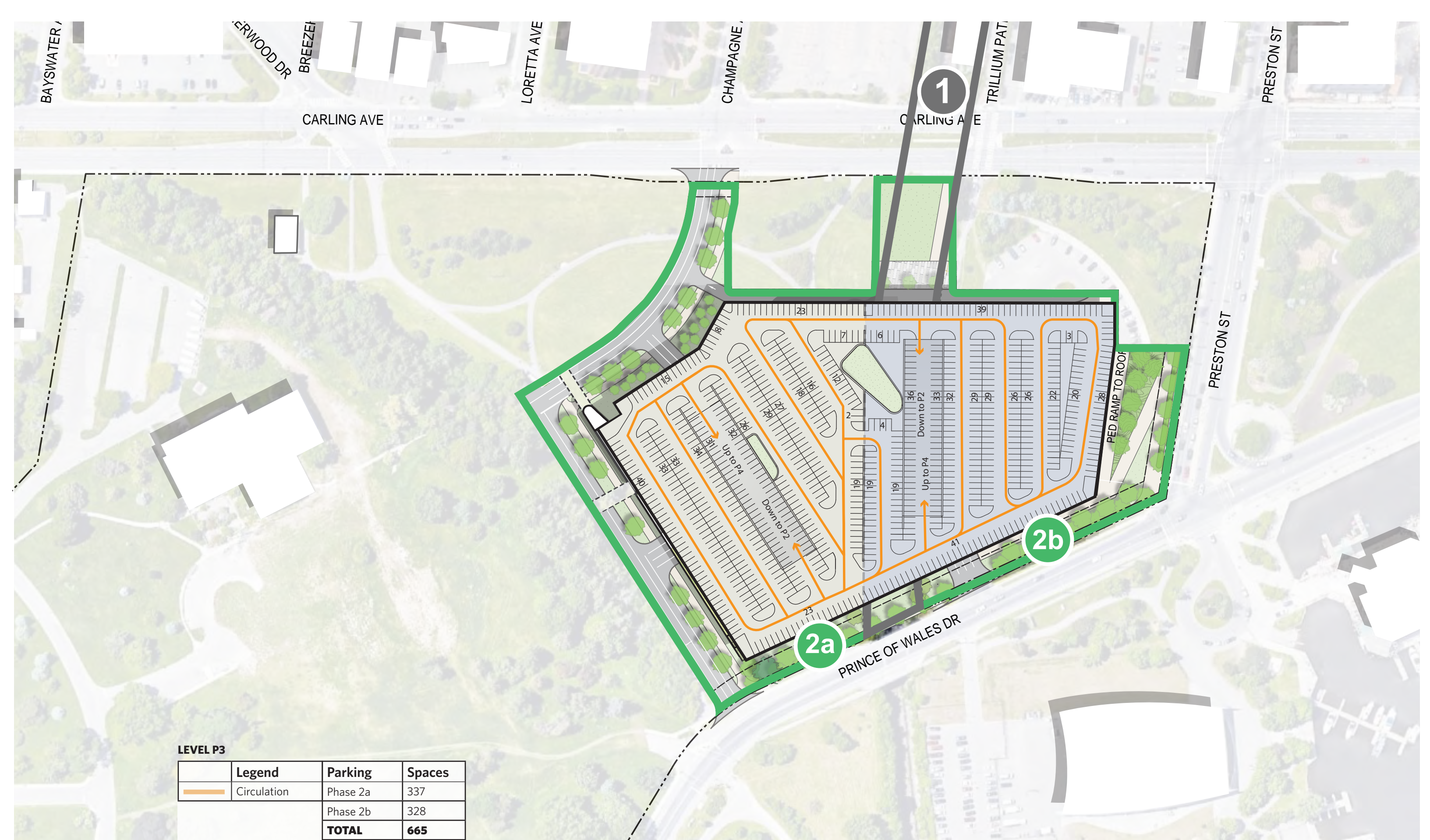
	Legend	Parking	Spaces
■	200 NCC Parking Spaces	Phase 2a	361
		Phase 2b	289
■	Barrier Free Parking Zone	NCC (incl. in 2b)	200
—	Circulation	TOTAL	650




LEVEL P2

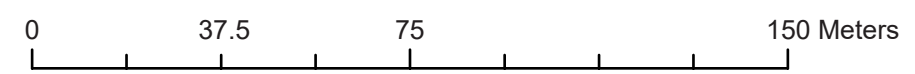
	Legend	Parking	Spaces
■	Barrier Free Parking Zone	Phase 2a	287
		Phase 2b	324
—	Circulation	TOTAL	611

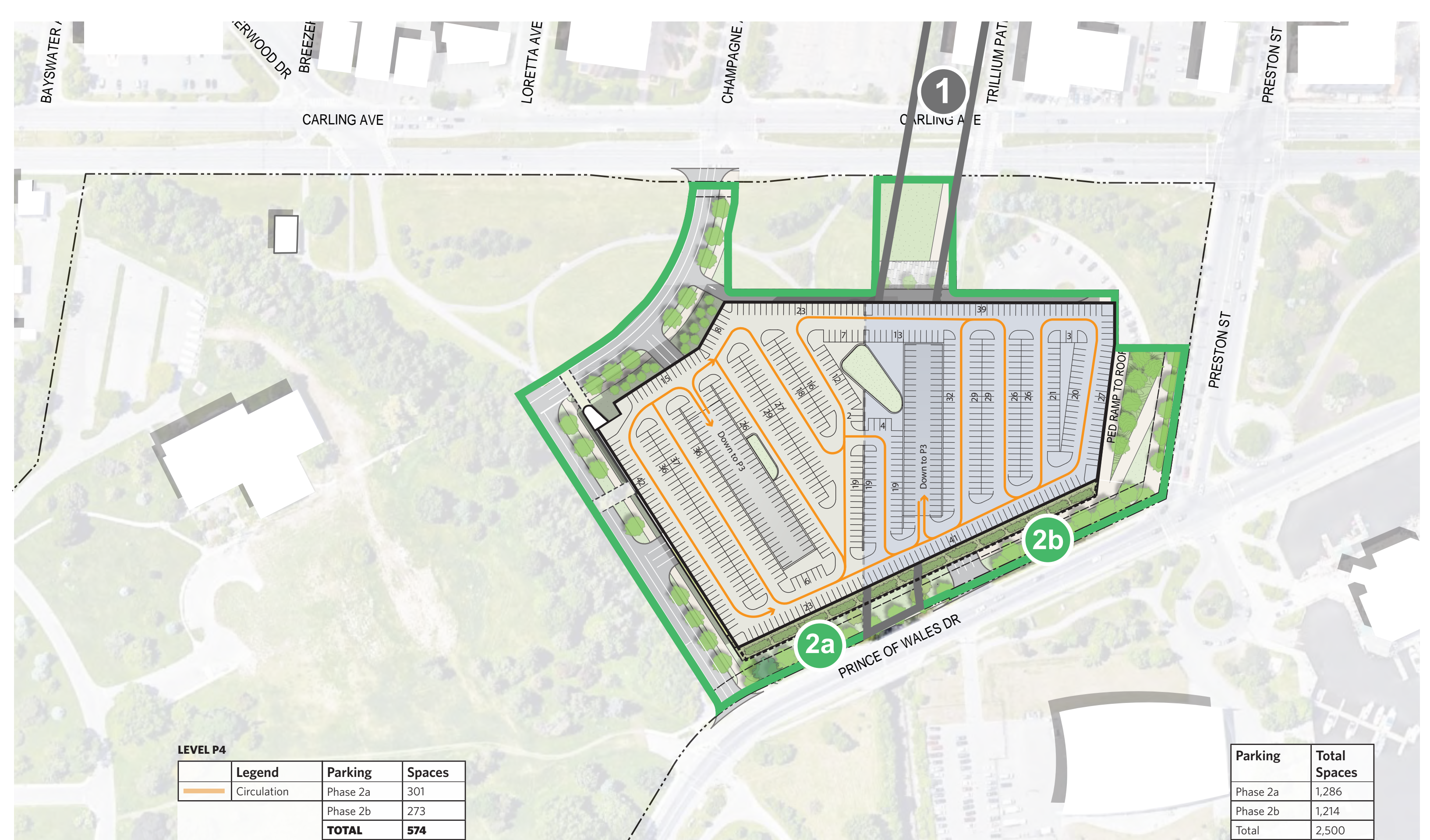




LEVEL P3

Legend	Parking	Spaces
	Phase 2a	337
	Phase 2b	328
	TOTAL	665





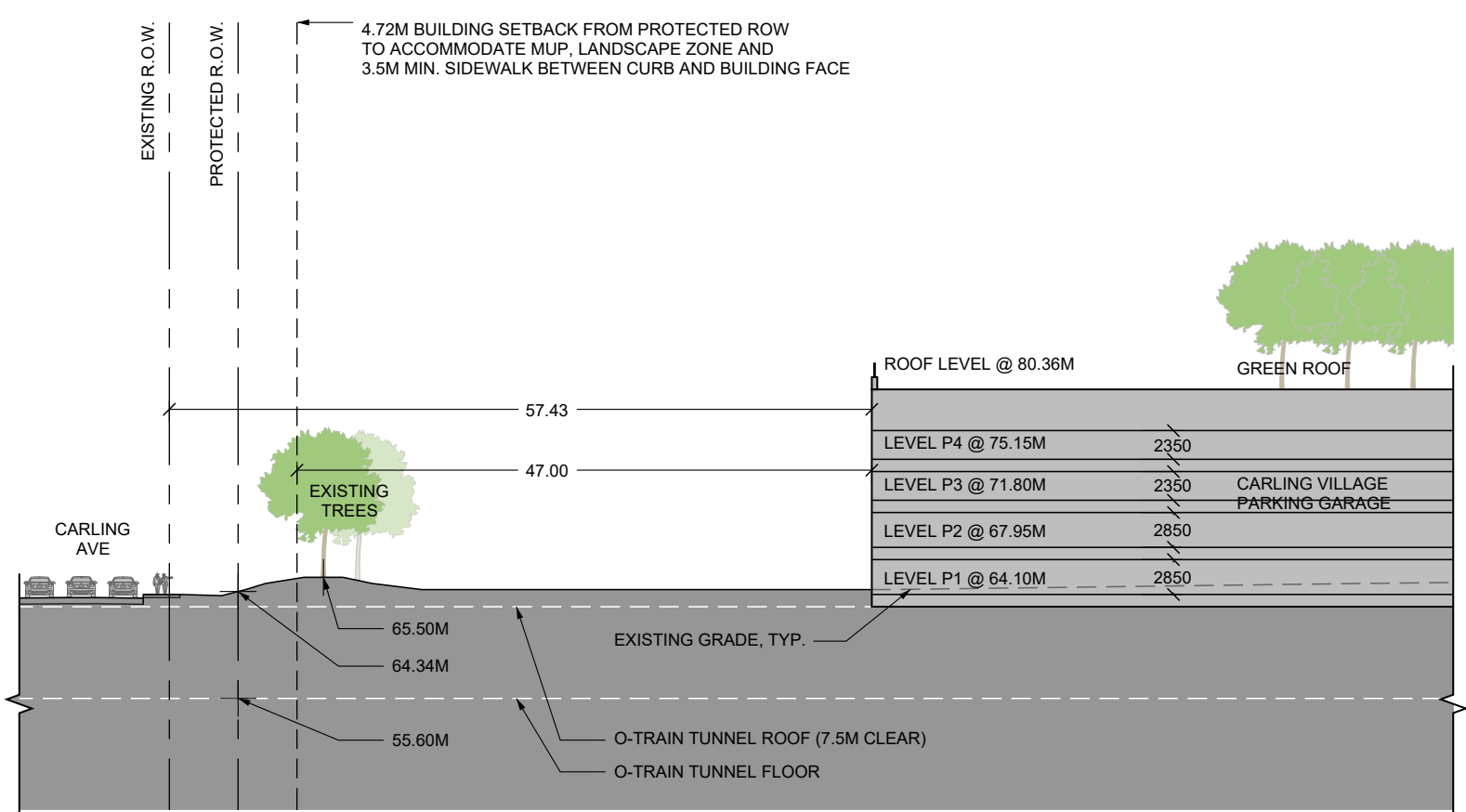
LEVEL P4

	Legend	Parking	Spaces
	Circulation	Phase 2a	301
		Phase 2b	273
		TOTAL	574

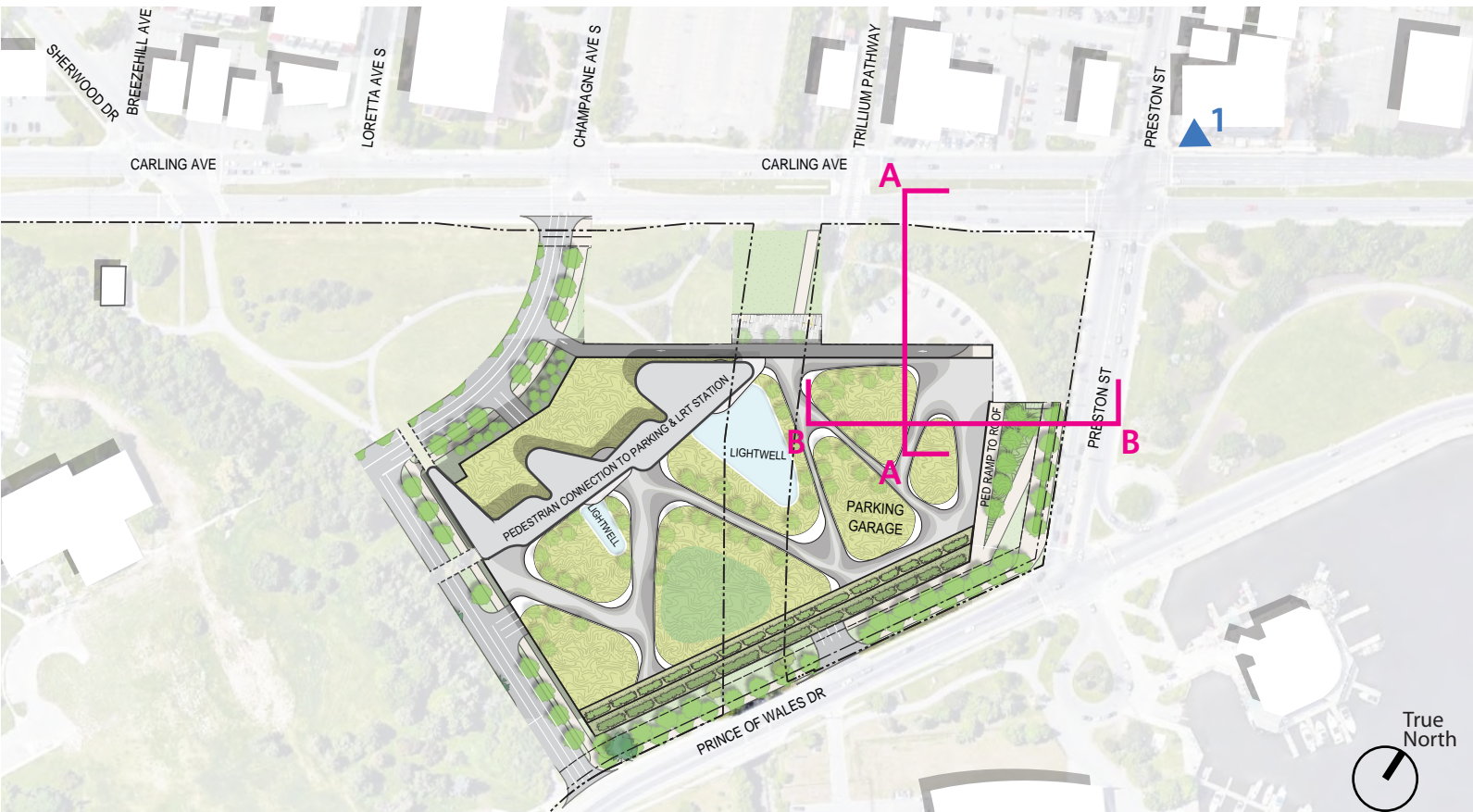
Parking	Total Spaces
Phase 2a	1,286
Phase 2b	1,214
Total	2,500



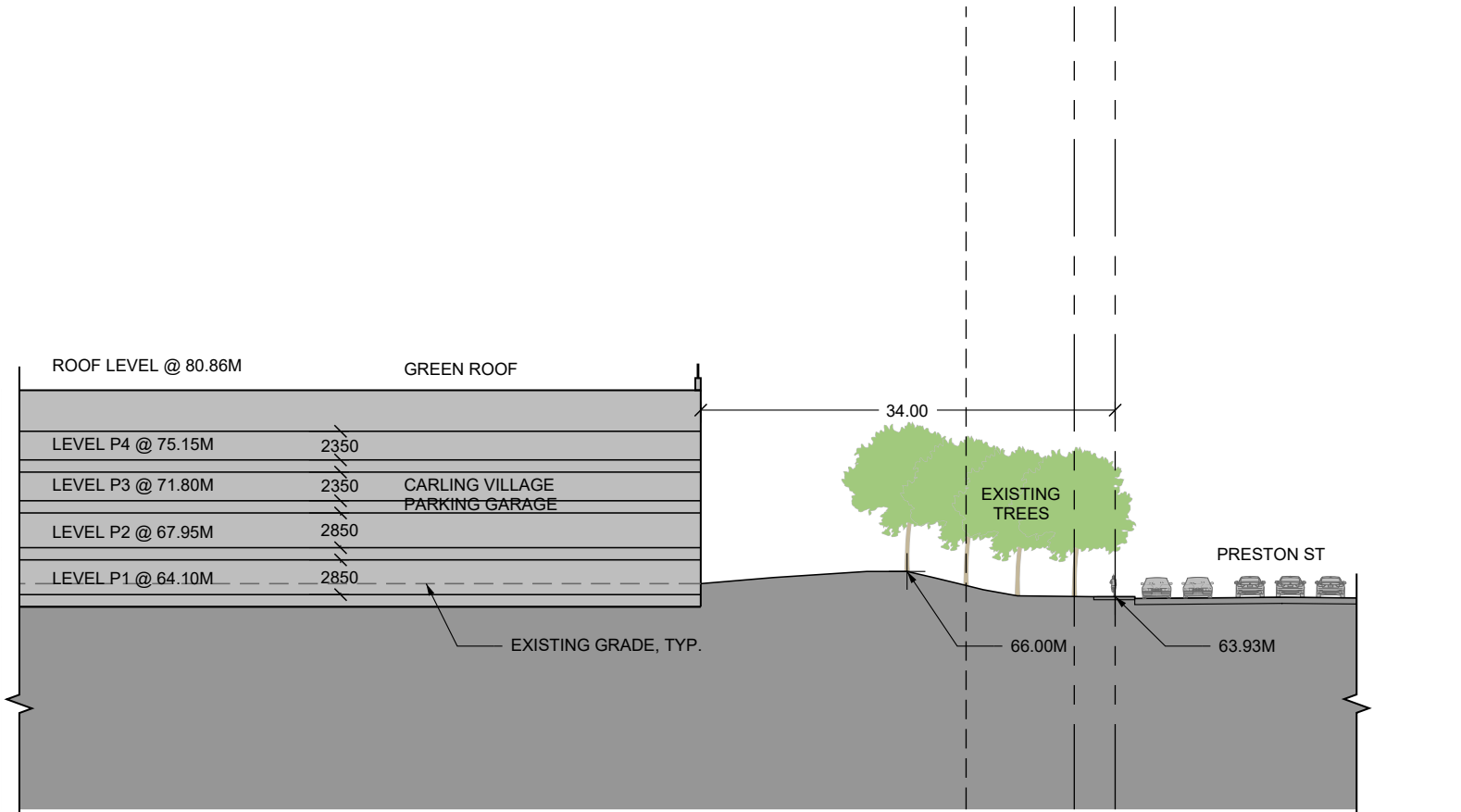
VIEW 1: CARLING AVENUE / PRESTON STREET (FACING SOUTH / WEST)



SECTION A



PHASE 2 PARKING GARAGE PLAN



SECTION B



1 - SOUTH / WEST ELEVATION



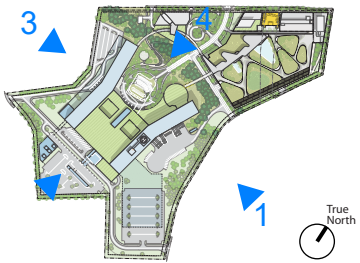
2 - SOUTH / EAST ELEVATION



3 - NORTH / WEST ELEVATION



4 - NORTH / EAST ELEVATION





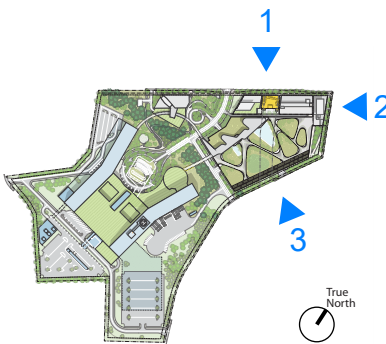
1 - NORTH ELEVATION

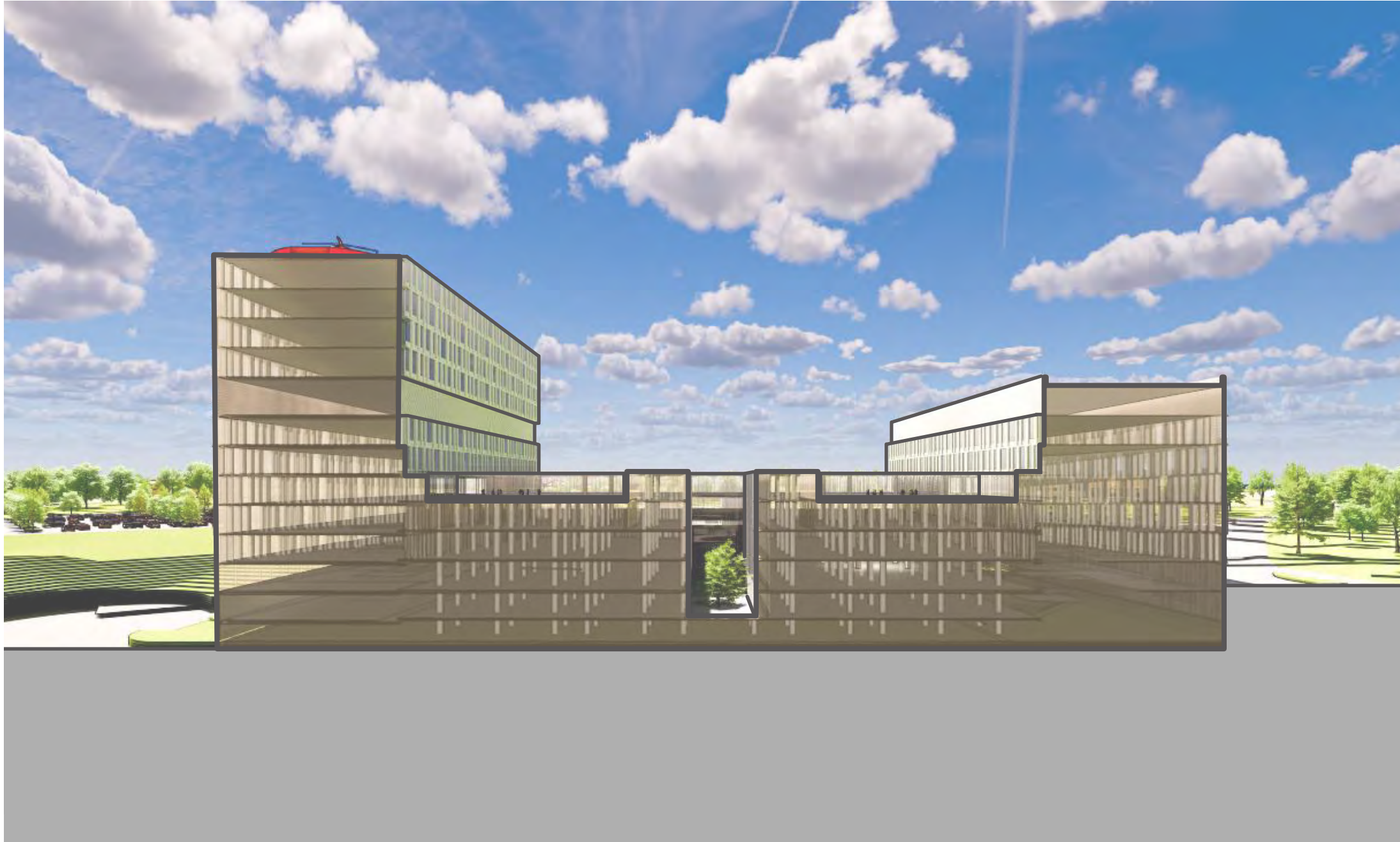


2 - EAST ELEVATION

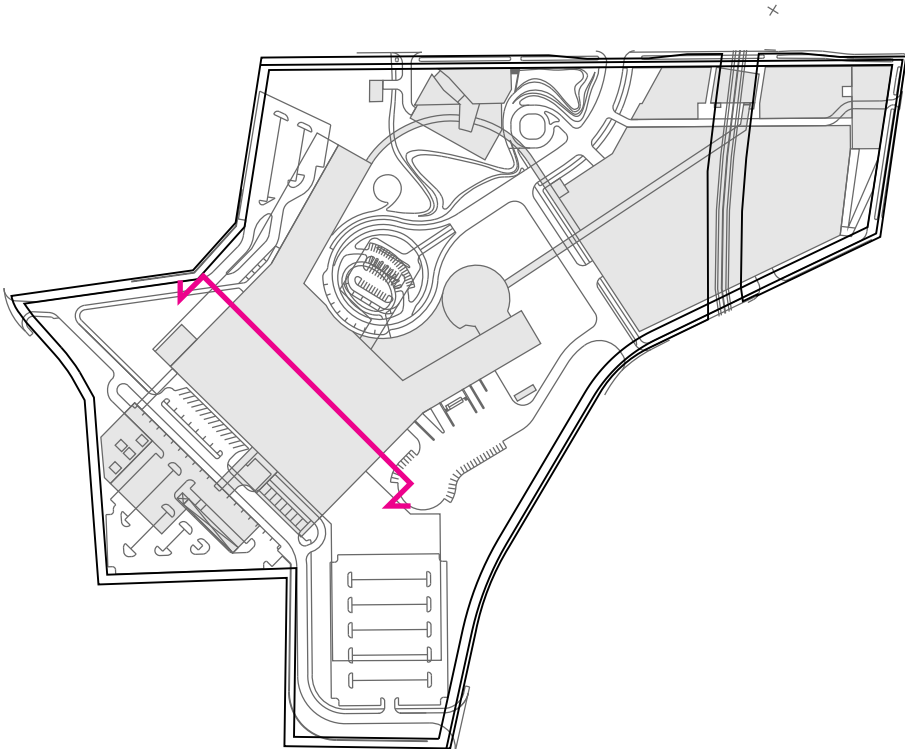


3 - SOUTH / WEST ELEVATION



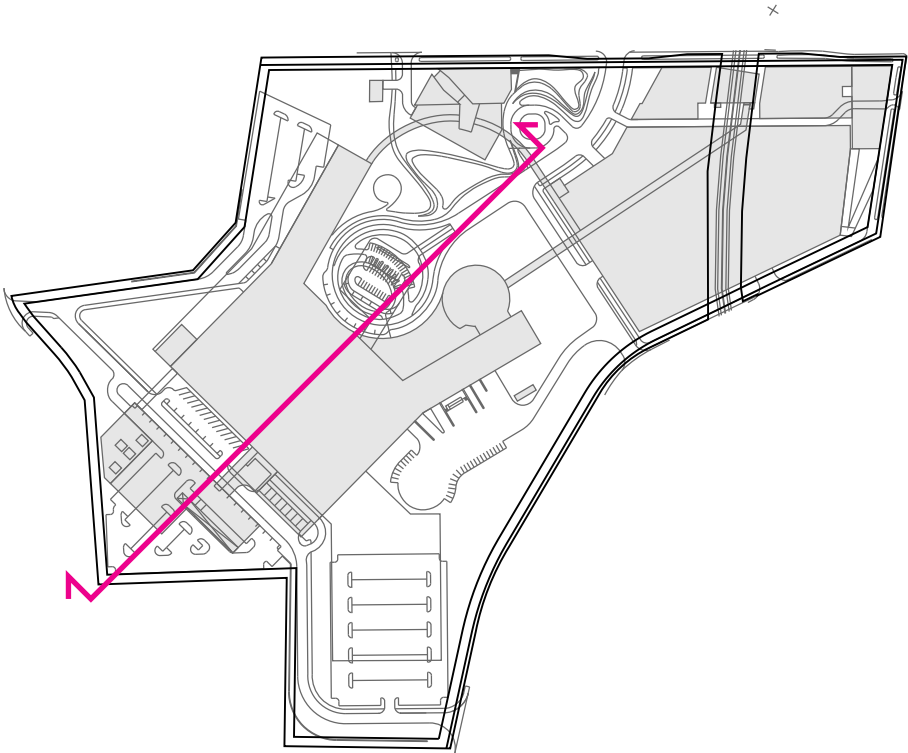


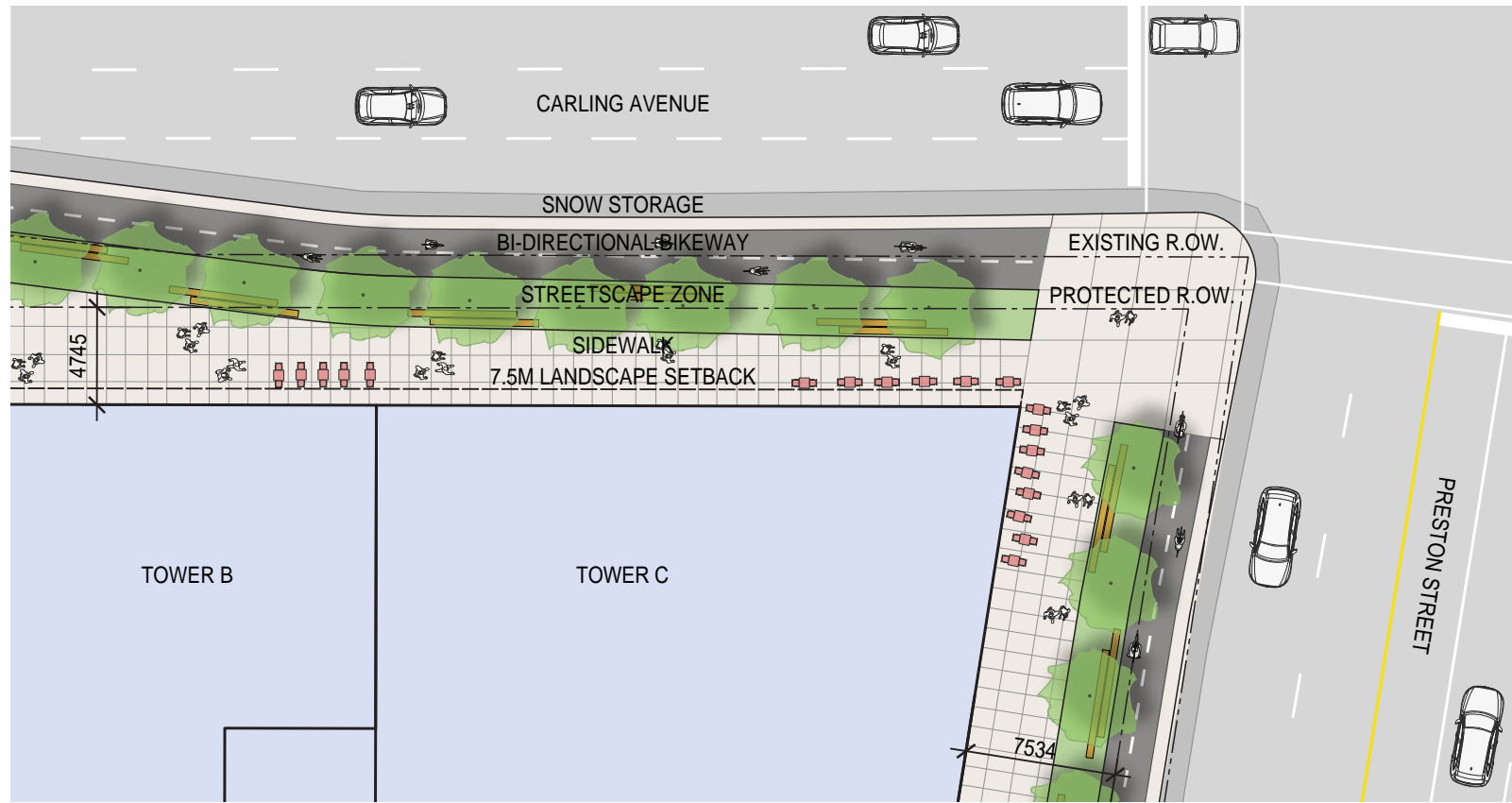
SECTION THROUGH TOWERS AND CENTRAL PODIUM



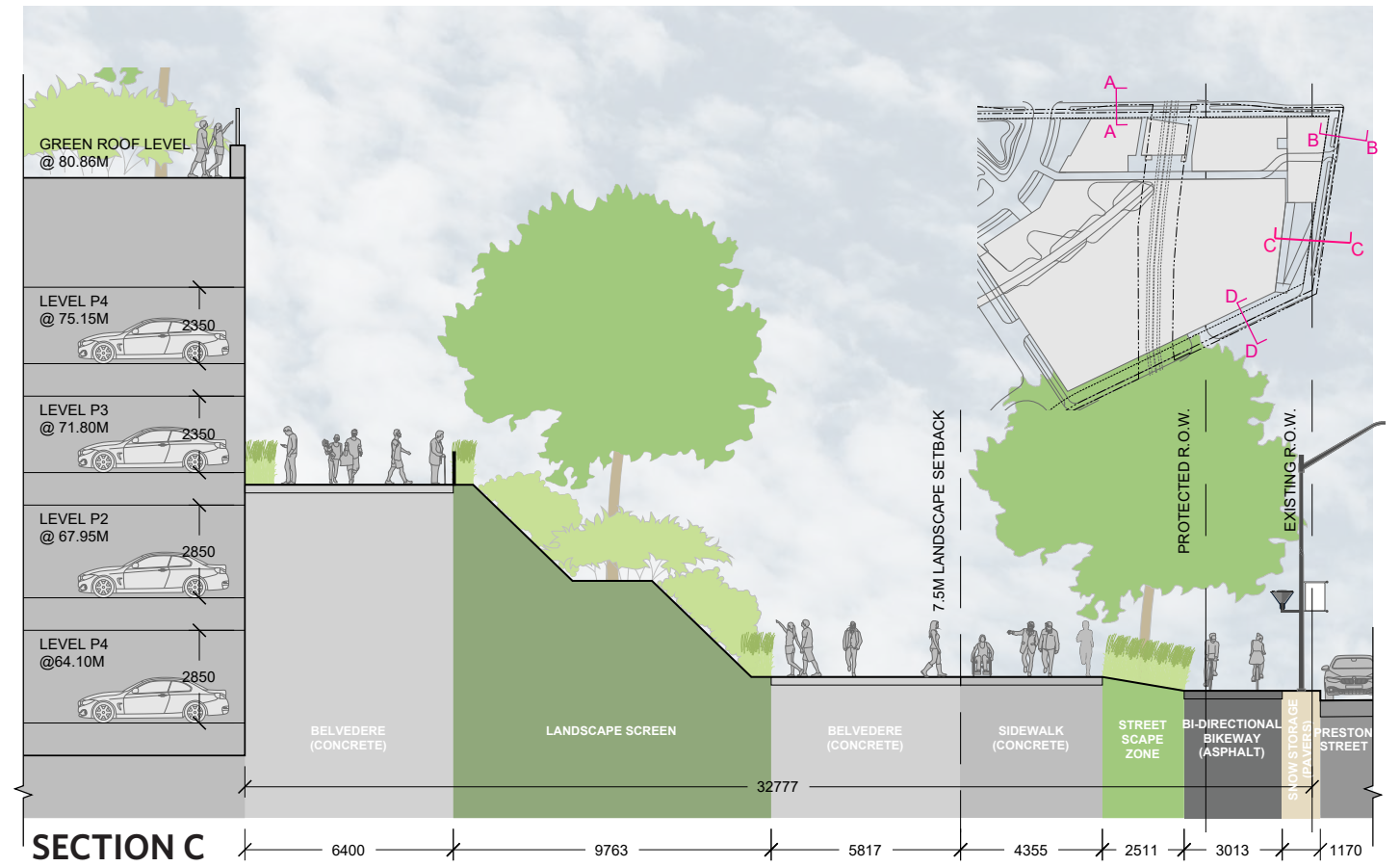


SECTION THROUGH CENTRAL UTILITY PLANT AND CENTRAL HOSPITAL PODIUM

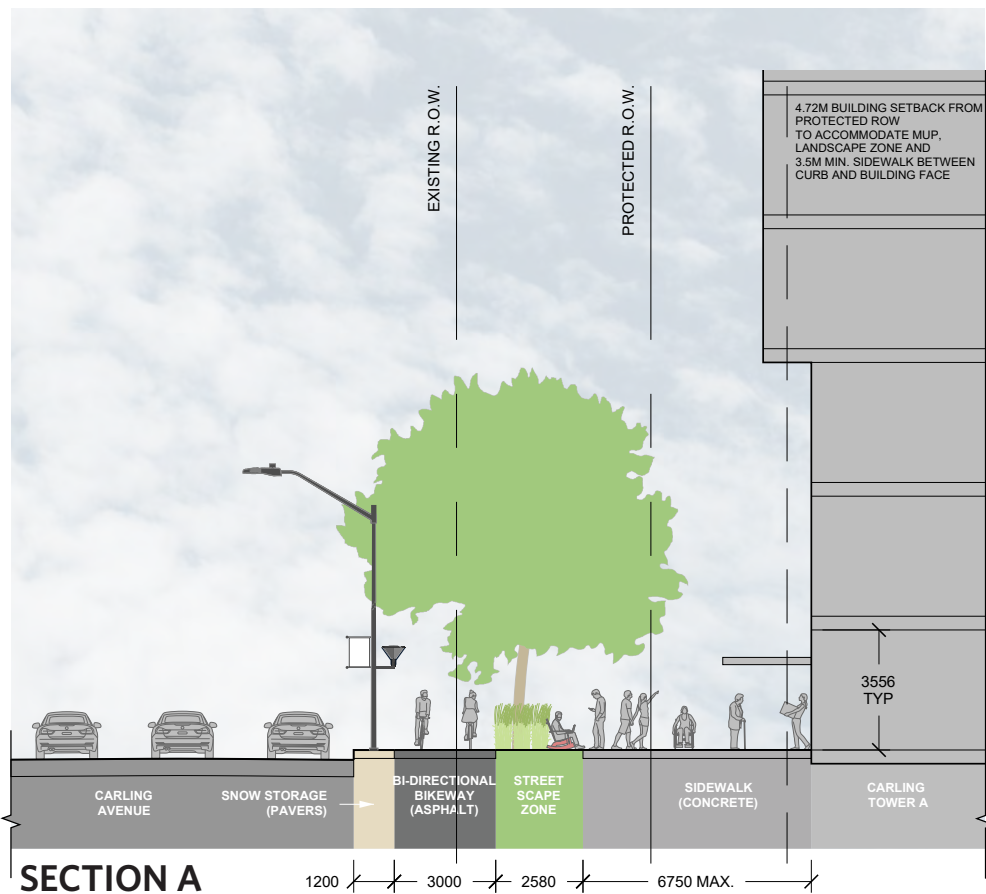




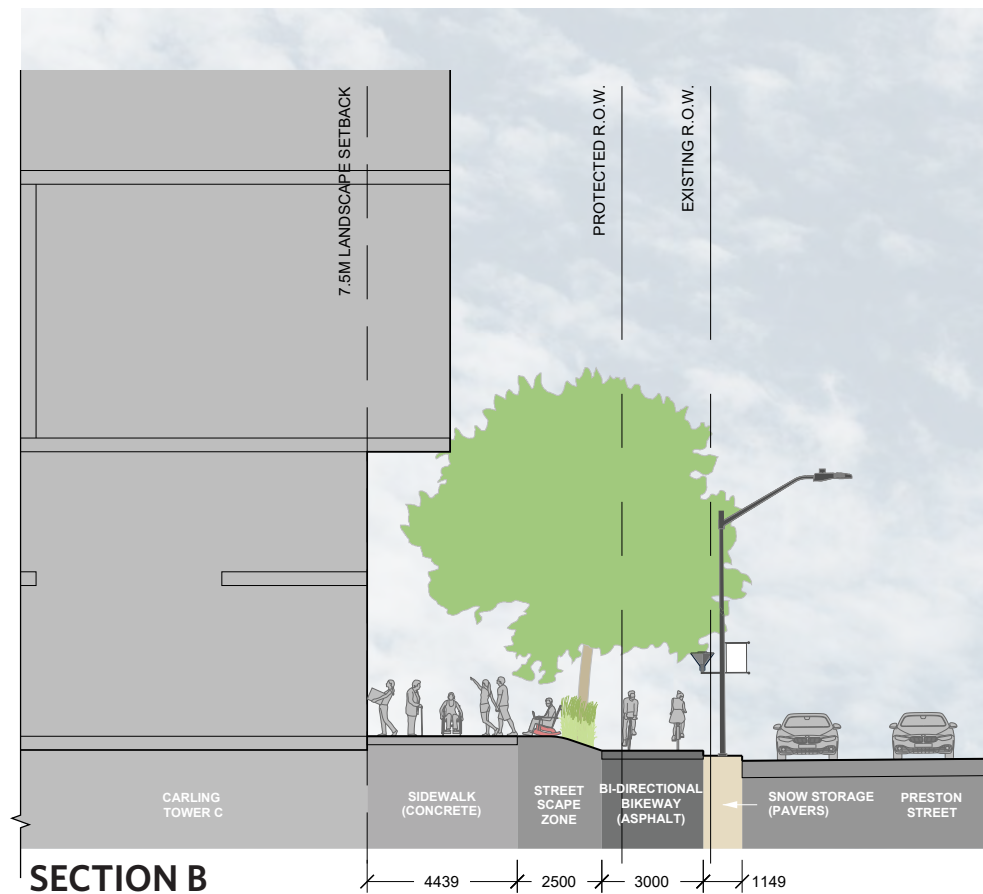
PLAN AT CARLING AVENUE AND PRESTON STREET



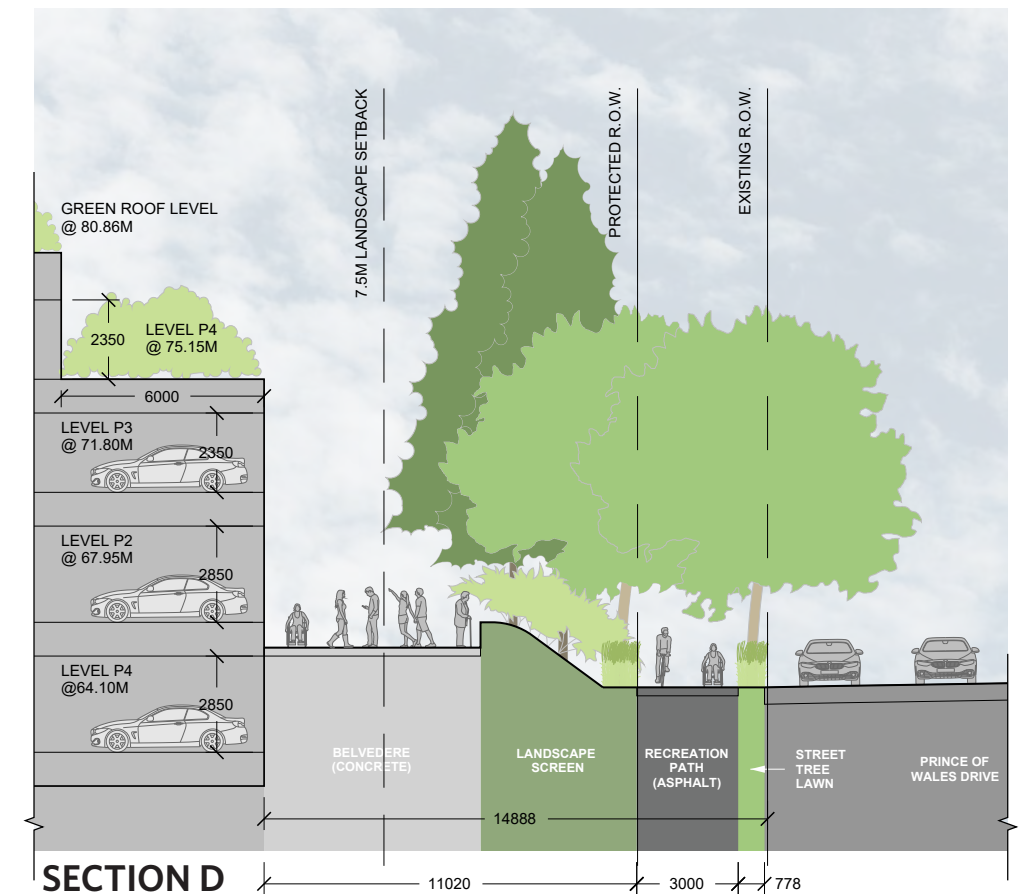
SECTION C



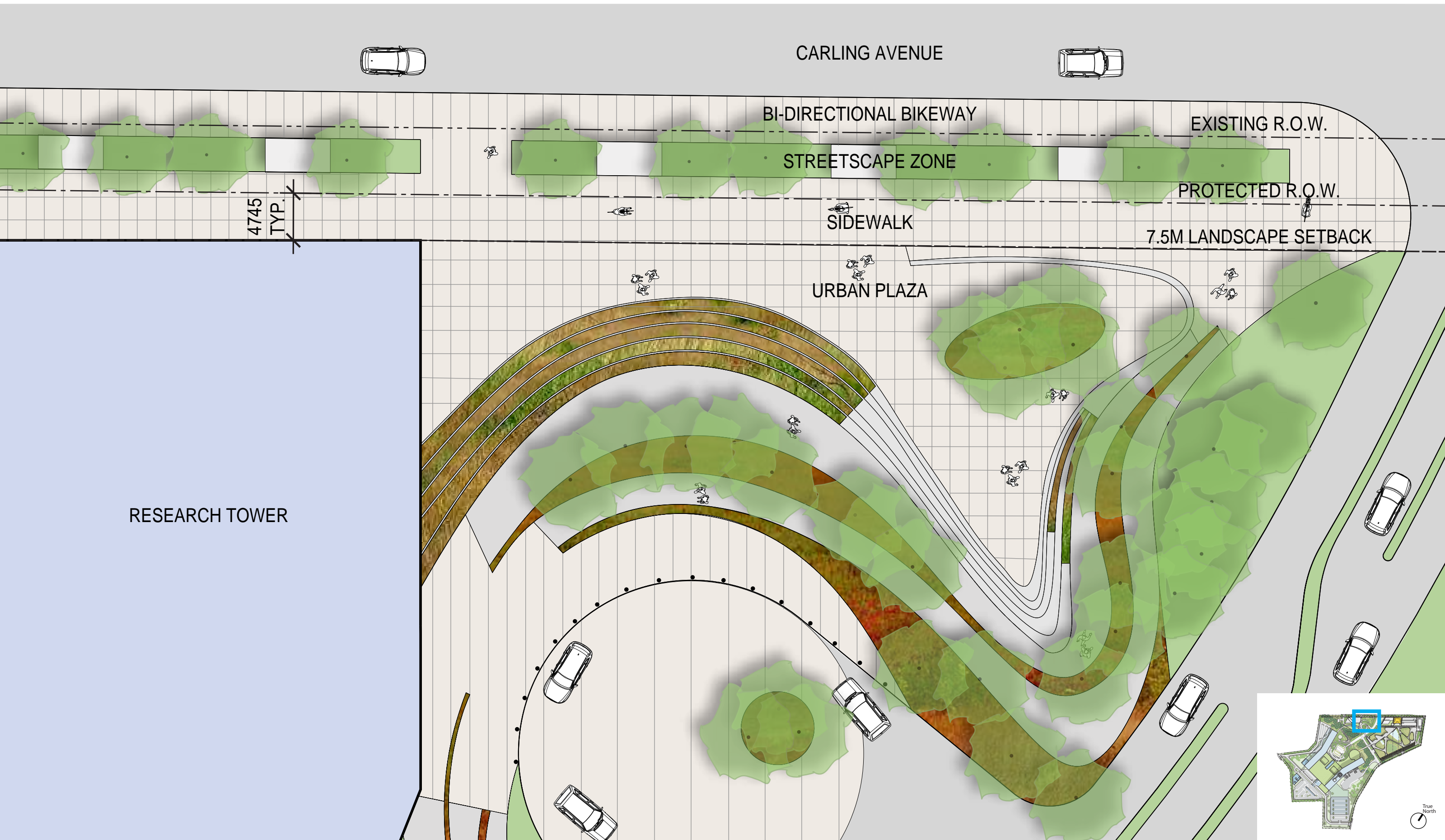
SECTION A



SECTION B



SECTION D



CARLING AVENUE

BI-DIRECTIONAL BIKEWAY

EXISTING R.O.W.

STREETSCAPE ZONE

PROTECTED R.O.W.

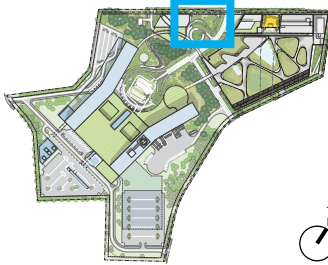
4745
TYP.

SIDEWALK

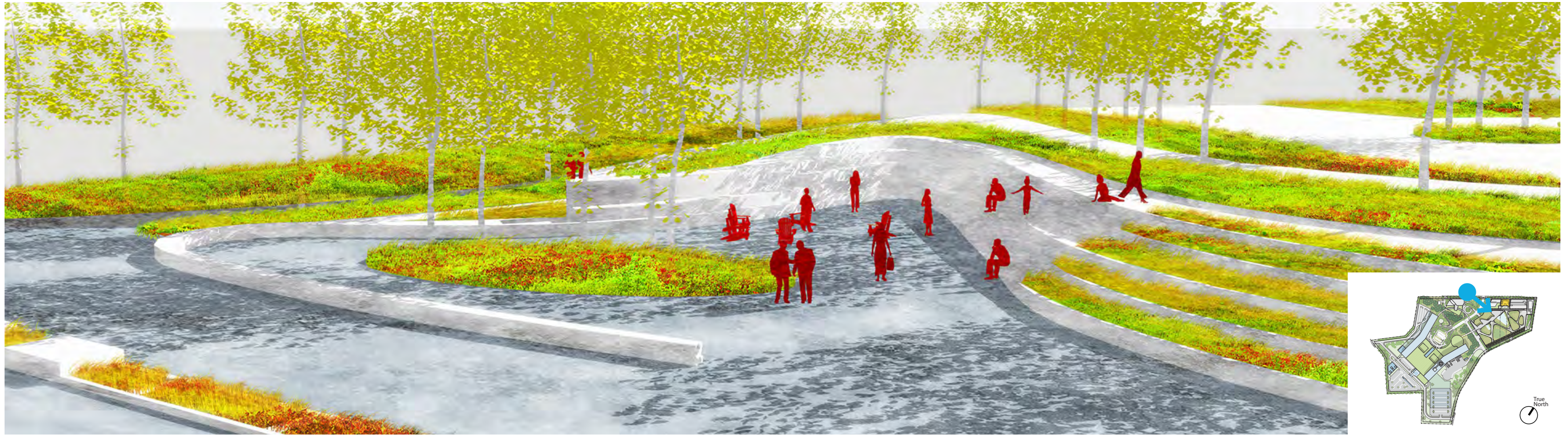
7.5M LANDSCAPE SETBACK

URBAN PLAZA

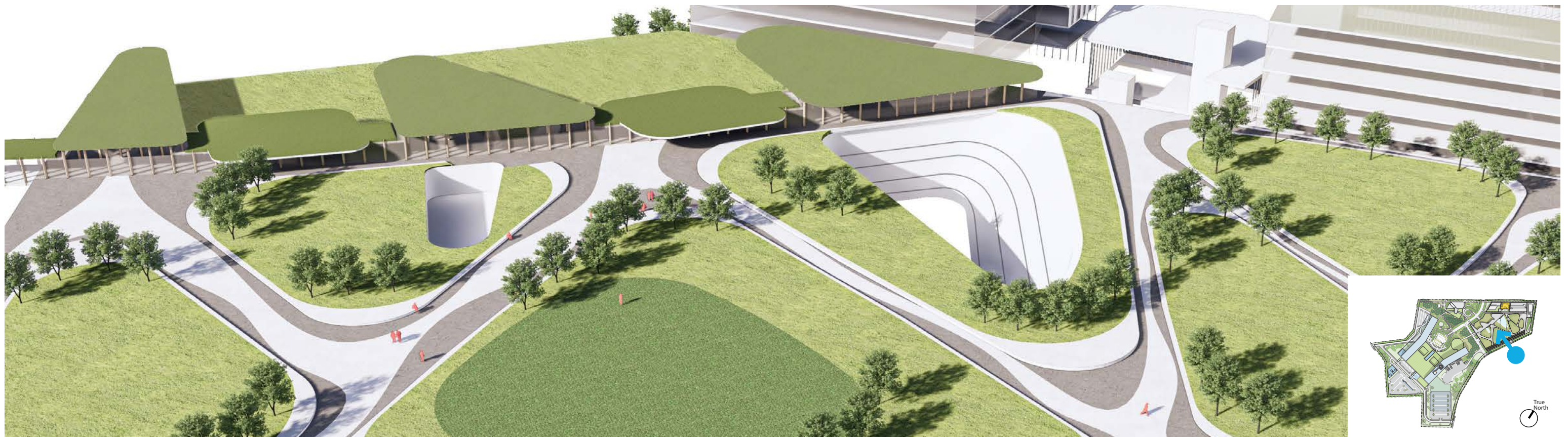
RESEARCH TOWER



PLAN AT CARLING AND CHAMPAGNE AVENUES



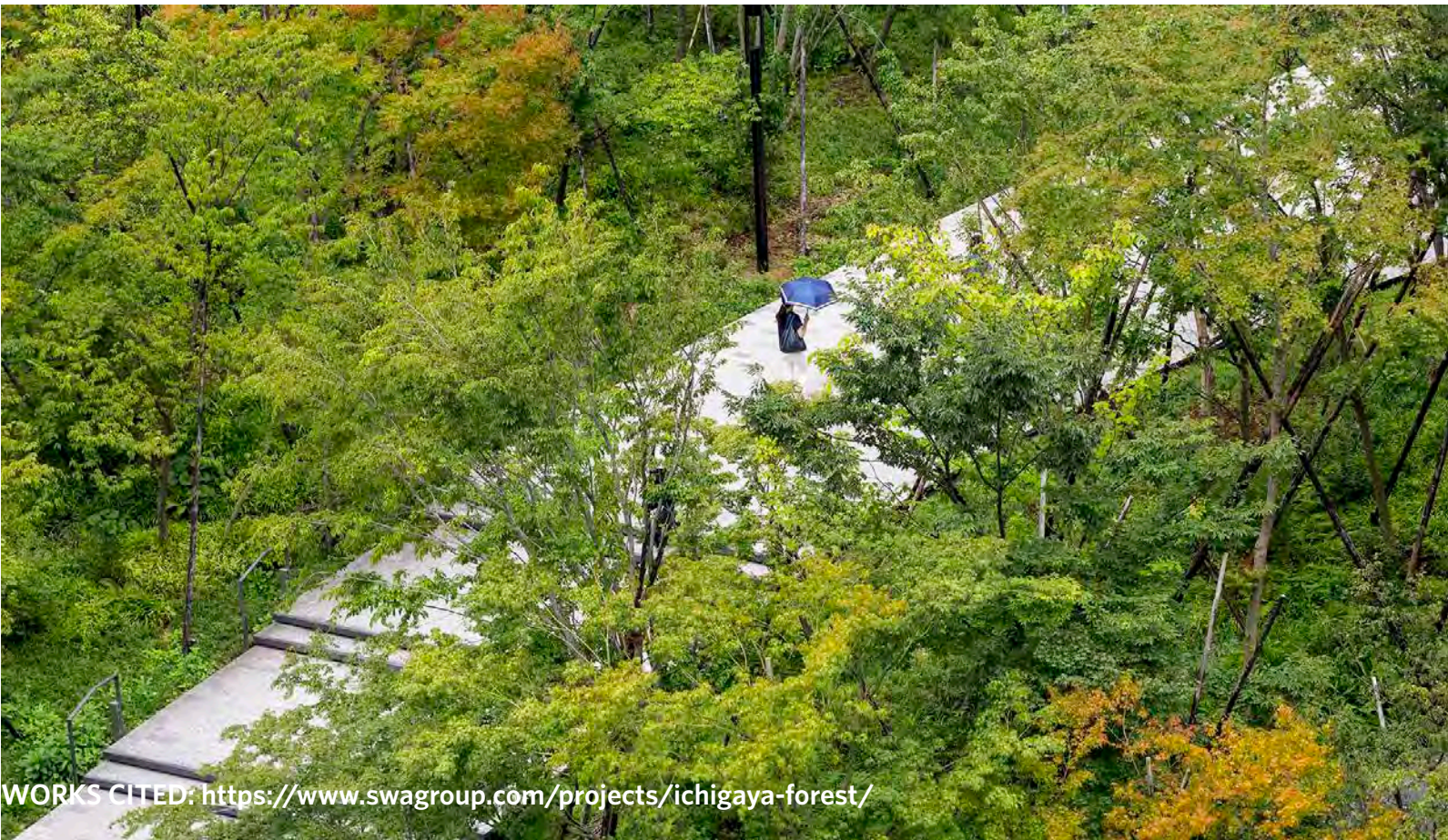
URBAN PLAZA AT CARLING AND CHAMPAGNE AVENUES



QUEEN JULIANA PARK FROM THE EAST



WORKS CITED: <https://mooool.com/en/lijia-intelligent-park-by-cqadi.html>



WORKS CITED: <https://www.swagroup.com/projects/ichigaya-forest/>



WORKS CITED: <https://www.swagroup.com/projects/ichigaya-forest/>



WORKS CITED: <https://www.mvva-inc.com/media/files/425327ecef4a6f3d1f800734adbdd013.jpg>



WORKS CITED: <https://image.architonic.com/pfm3-3/2123912/parklets-10-new-fam-g-arcit18.jpg>



WORKS CITED: <http://landezine.com/index.php/2012/10/redevelopment-of-the-trapeze-former-renoault-site-by-aaupc/>



WORKS CITED: <https://www.ice.org.uk/ICEDevelopmentWebPortal/media/what-is-civil-engineering/projects/high-line-new-york.jpg?ext=.jpg>



WORKS CITED: https://images.adsttc.com/media/images/5f11/014a/b357/651e/7600/01ea/large_jpg/19007-ASPECT-Studios-Urban-Gallery-HyperLane-06-Photo-Credit-Lubing.jpg?1594949948



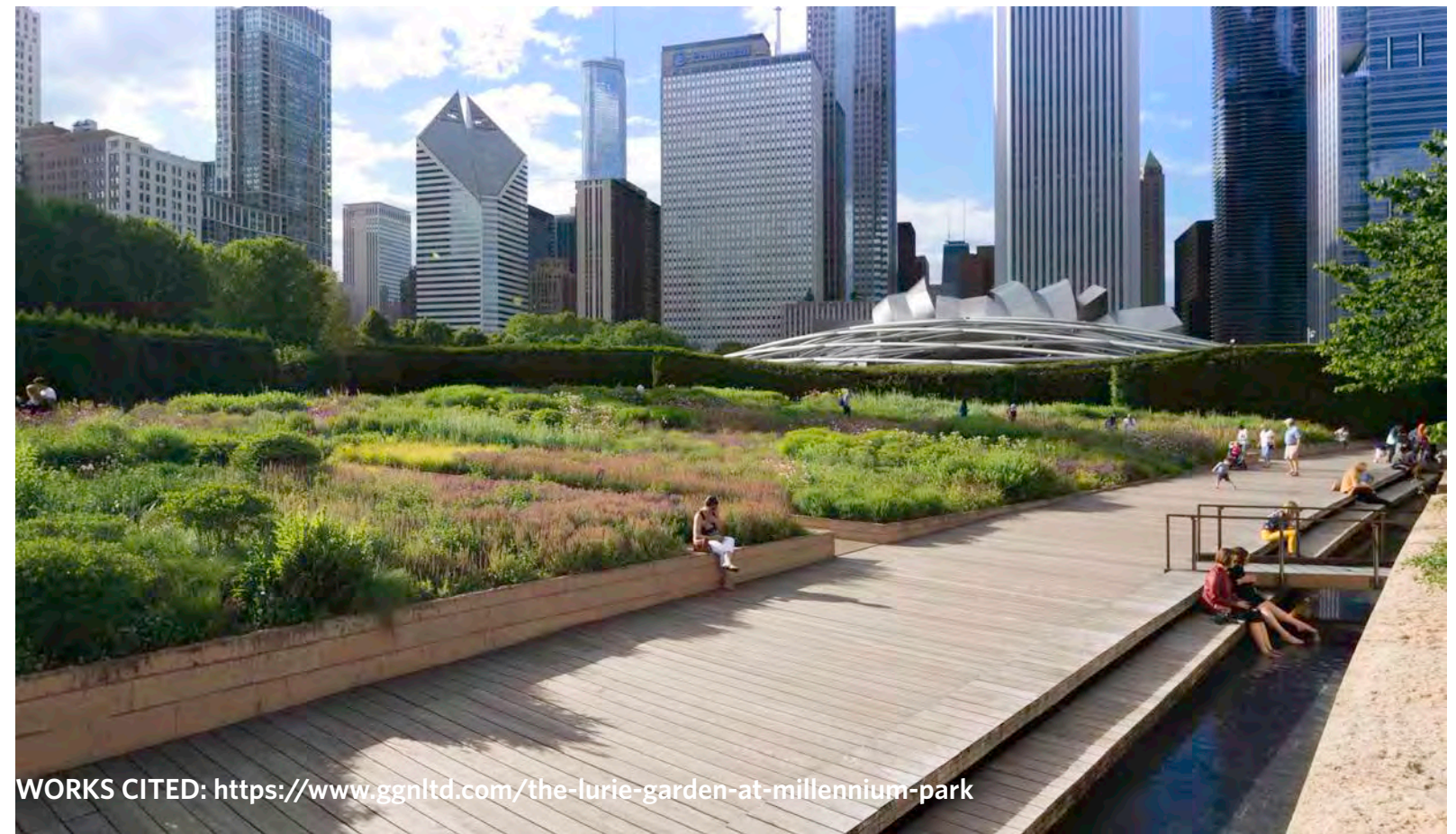
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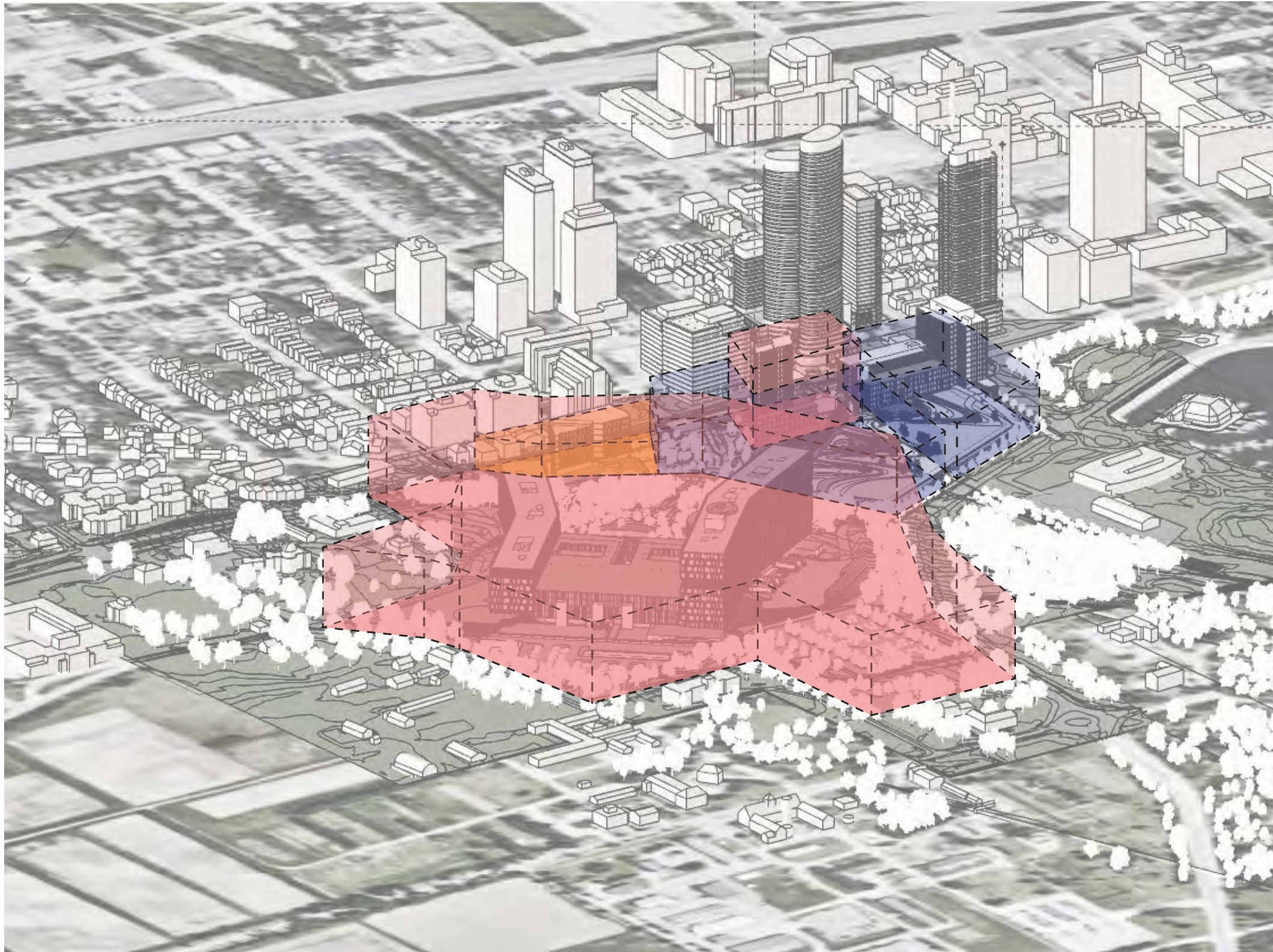
SOURCE: <https://www.urbangardensweb.com/2013/08/12/floating-gardens-giant-chalkboards-and-climbing-walls-on-banks-of-seine-in-paris/>



WORKS CITED: https://fht-website.s3.amazonaws.com/content/uploads/2018/07/24203559/overview_header_iwan_baan.jpg



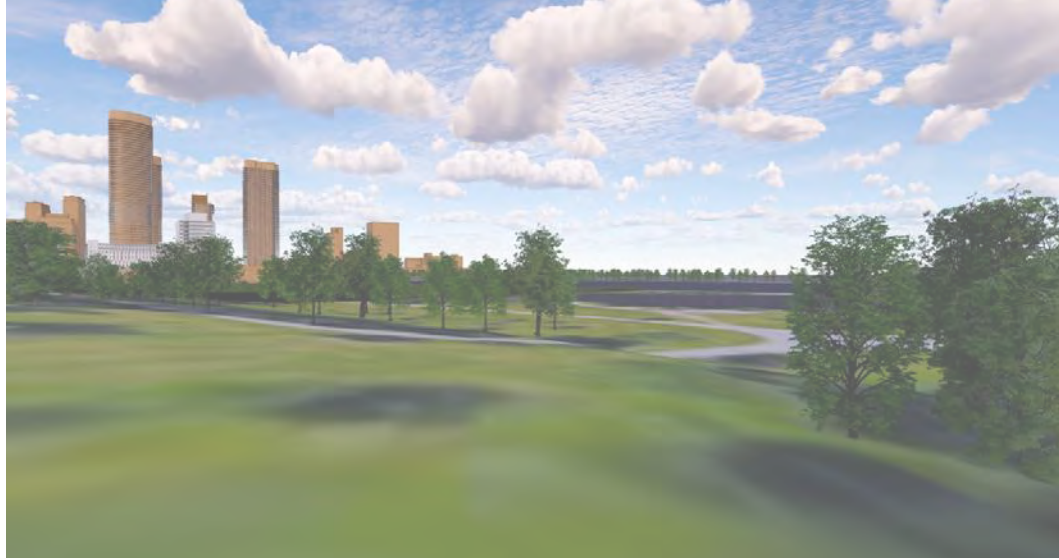
WORKS CITED: <https://www.ggnltd.com/the-lurie-garden-at-millennium-park>



HEIGHT / HAUTEUR
MAXIMUM BUILDING HEIGHTS / HAUTEURS MAXIMALES DES IMMEUBLES

- 4 storeys / étages
- 6 storeys / étages
- 9 storeys / étages
- 15 storeys / étages
- 18 storeys / étages
- 20 storeys / étages
- 25 storeys / étages
- 30 storeys / étages
- 31+ storeys / étages

**City of Ottawa Official Plan
 Consolidation and Amendments**
**Ville d'Ottawa Plan officiel
 Amendement au plan directeur approuvé**
OMB Decision / Décision de la CAMO PL141147, PL141223 (March 2016)
 # 183 (04/2017) # 214 # 227 # 234* # 246



1a - VIEW FROM ARBORETUM LOOKING NORTH



1b - VIEW THROUGH THE ARBORETUM



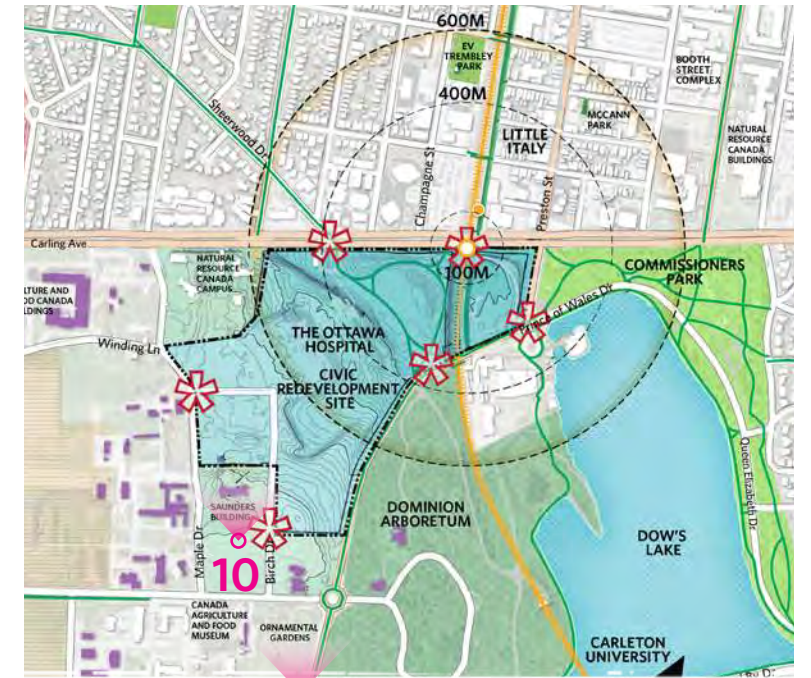
1c - VIEW TOWARD FLETCHER WILDLIFE GARDEN



2 - VIEW NORTH FROM PRINCE OF WALES DRIVE



5 - VIEW NORTH FROM PRINCE FO WALES DRIVE



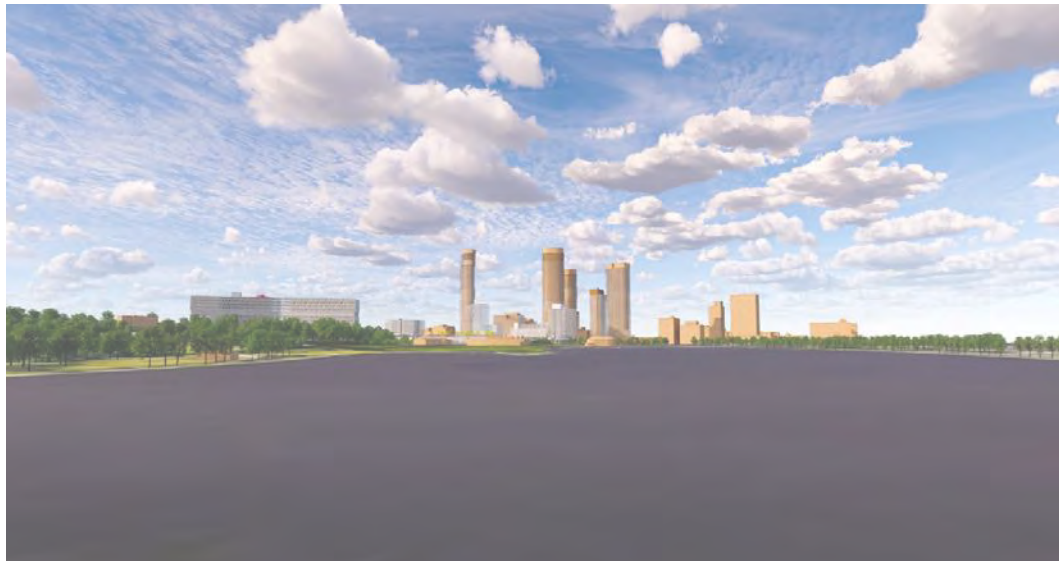
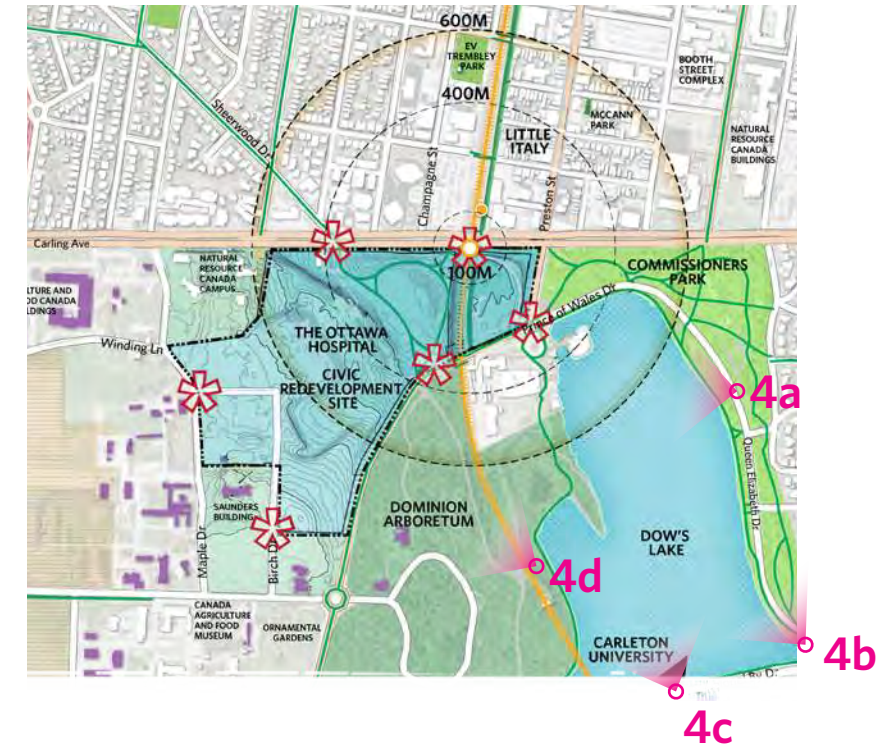
10 - VIEW NORTH TOWARDS SAUNDERS BUILDING



4a - VIEW FROM RIDEAU CANAL WESTERN PATHWAY TO HOSPITAL SITE



4b - VIEW FROM BRONSON AVENUE BRIDGE



4c - VIEW FROM CARLETON UNIVERSITY



4d - VIEW FROM RIDEAU CANAL WESTERN PATHWAY THROUGH ARBORETUM



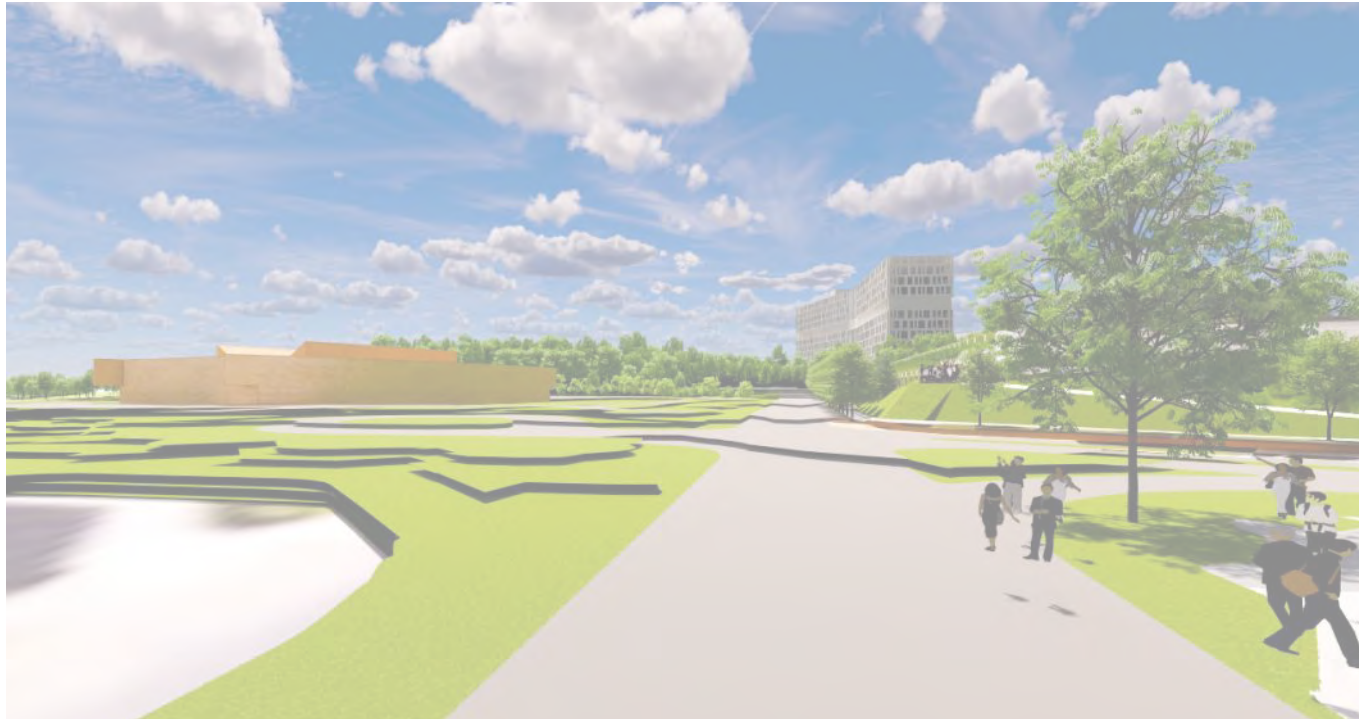
13a - VIEW FROM COMMISSIONER'S PARK



13b - VIEW FROM EAST EDGE OF DOW'S LAKE



13c - VIEW FROM RIDEAU CANAL LOCKS



1 - QUEEN ELIZABETH DRIVE / PRESTON (facing west)



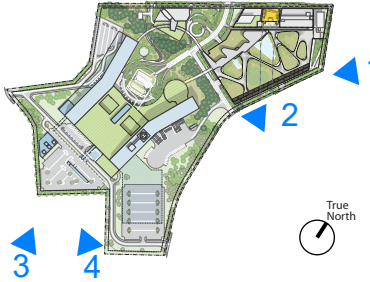
2 - PRINCE OF WALES DRIVE (facing west/south towards loading docks)



3 - FROM SAUNDERS BUILDING (facing north / east)

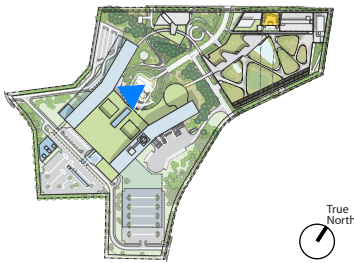


4 - FROM SAUNDERS BUILDING (facing north / west)



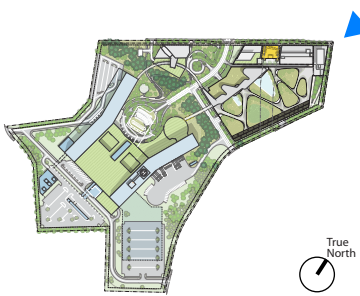


VIEW TOWARDS MAIN PLAZA / CARLING AVENUE FROM HOSPITAL MAIN CONCOURSE



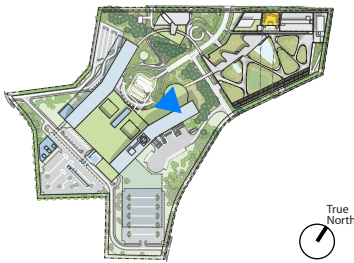


VIEW FROM CARLING AVENUE AND PRESTON STREET SHOWING PARKING GARAGE AND LRT TRANSIT STATION

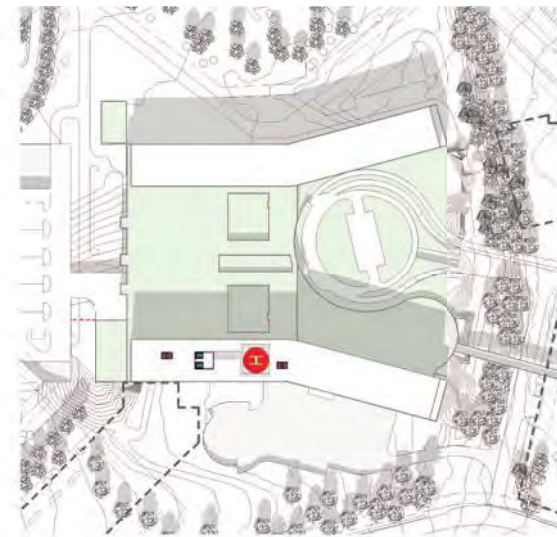




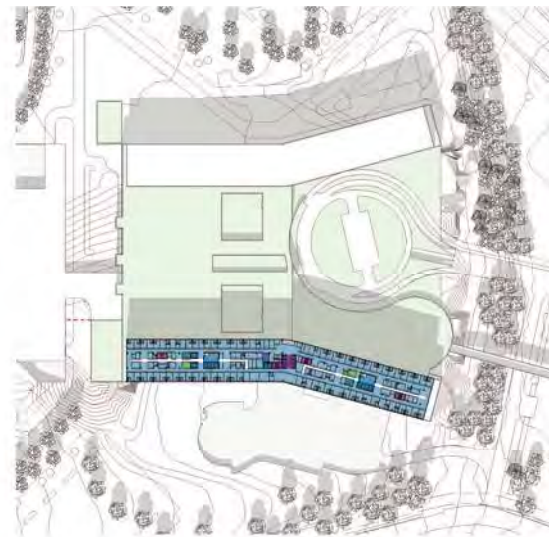
INTERIOR VIEW OF CAFETERIA LOOKING OUT TOWARDS ESCARPMENT



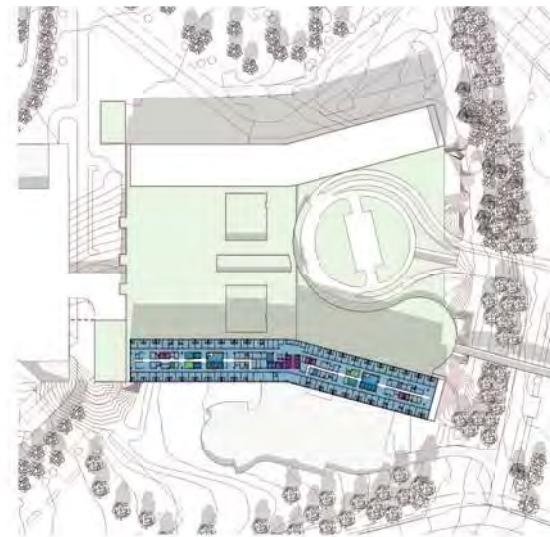
True North



LEVEL 12



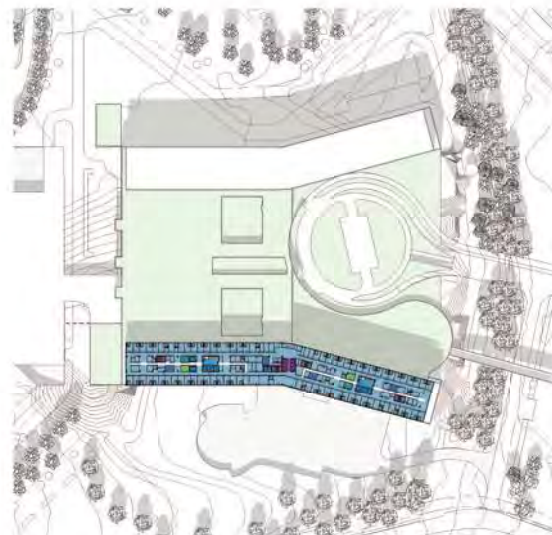
LEVEL 11



LEVEL 10



LEVEL 09



LEVEL 08



LEVEL 07



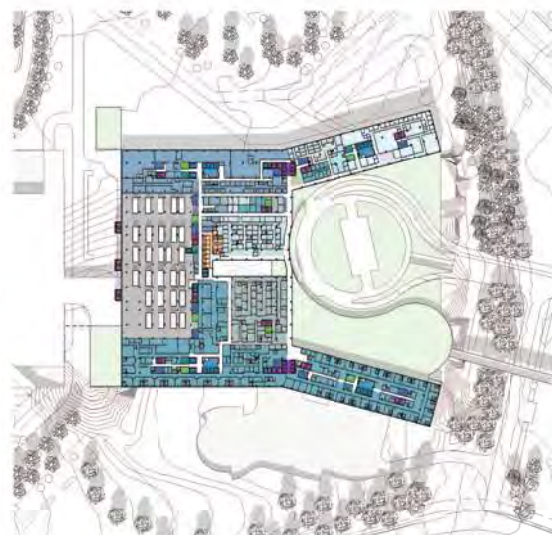
LEVEL 06



LEVEL 05



LEVEL 04



LEVEL 03



LEVEL 02



LEVEL 01



LEVEL E



LEVEL B



MARCH 1ST AT 9AM



MARCH 1ST AT 12PM



MARCH 1ST AT 3PM



MARCH 1ST AT 6PM



JUNE 1ST AT 9AM



JUNE 1ST AT 12PM



JUNE 1ST AT 3PM



JUNE 1ST AT 6PM



SEPTEMBER 1ST AT 9AM



SEPTEMBER 1ST AT 12PM



SEPTEMBER 1ST AT 3PM



SEPTEMBER 1ST AT 6PM



DECEMBER 1ST AT 9AM



DECEMBER 1ST AT 12PM



DECEMBER 1ST AT 3PM



DECEMBER 1ST AT 6PM

ROAD ALLOWANCE BETWEEN CONCESSION 1 (OTTAWA FRONT) & CONCESSION B (RIDEAU FRONT) (NEPEAN)

CARLING AVENUE (BY-LAW 2777, INST. 86162) (Regional Road No. 38)

JOB BENCHMARK No. 1
CITY OF OTTAWA
CONTROL MONUMENT 20160346
Elev.=64.31

JOB BENCHMARK No. 2
CITY OF OTTAWA
CONTROL MONUMENT 20160349
Elev.=62.49

REGISTERED PLAN 69
WALESTON STREET
(Regional Road No. 73)

JOB BENCHMARK No. 3
CITY OF OTTAWA
CONTROL MONUMENT 20160346
Elev.=64.31

JOB BENCHMARK No. 4
CITY OF OTTAWA
CONTROL MONUMENT 20160347
Elev.=65.59

PRINCE OF WALES DRIVE
(Regional Road No. 73)

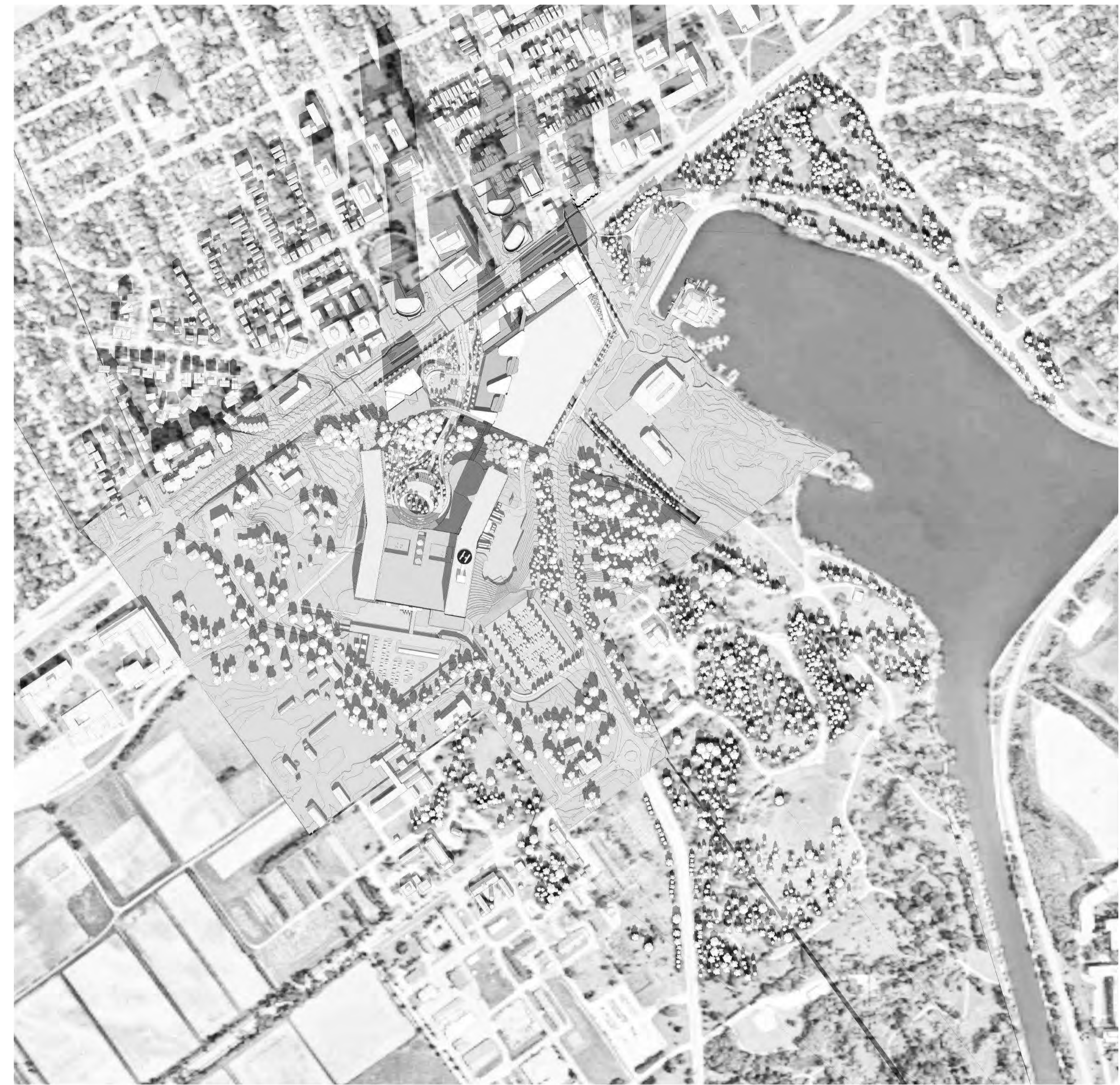


APPENDIX C

Shadow Impact Study (HDR Inc.)



4 SUN & SHADOW STUDY - MARCH 1st @ 9AM 1
1:2000



1 SUN & SHADOW STUDY - MARCH 1st @ 12PM 1
1:2000



2 SUN & SHADOW STUDY - MARCH 1st @ 3PM 1
1:2000



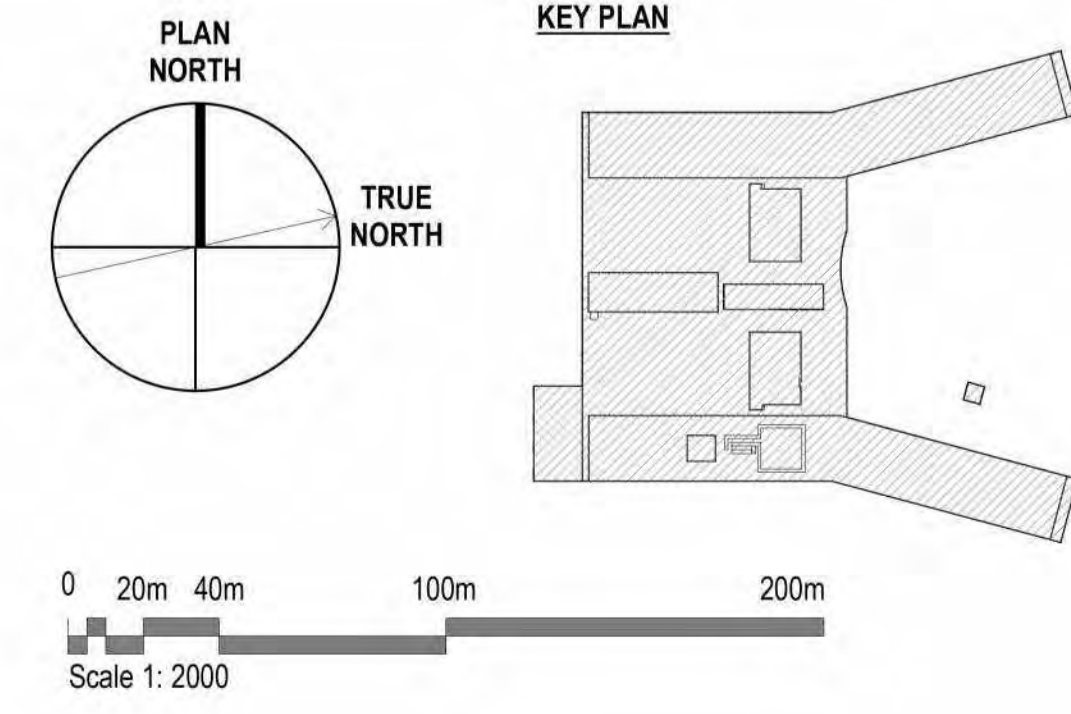
3 SUN & SHADOW STUDY - MARCH 1st @ 6PM 1
1:2000

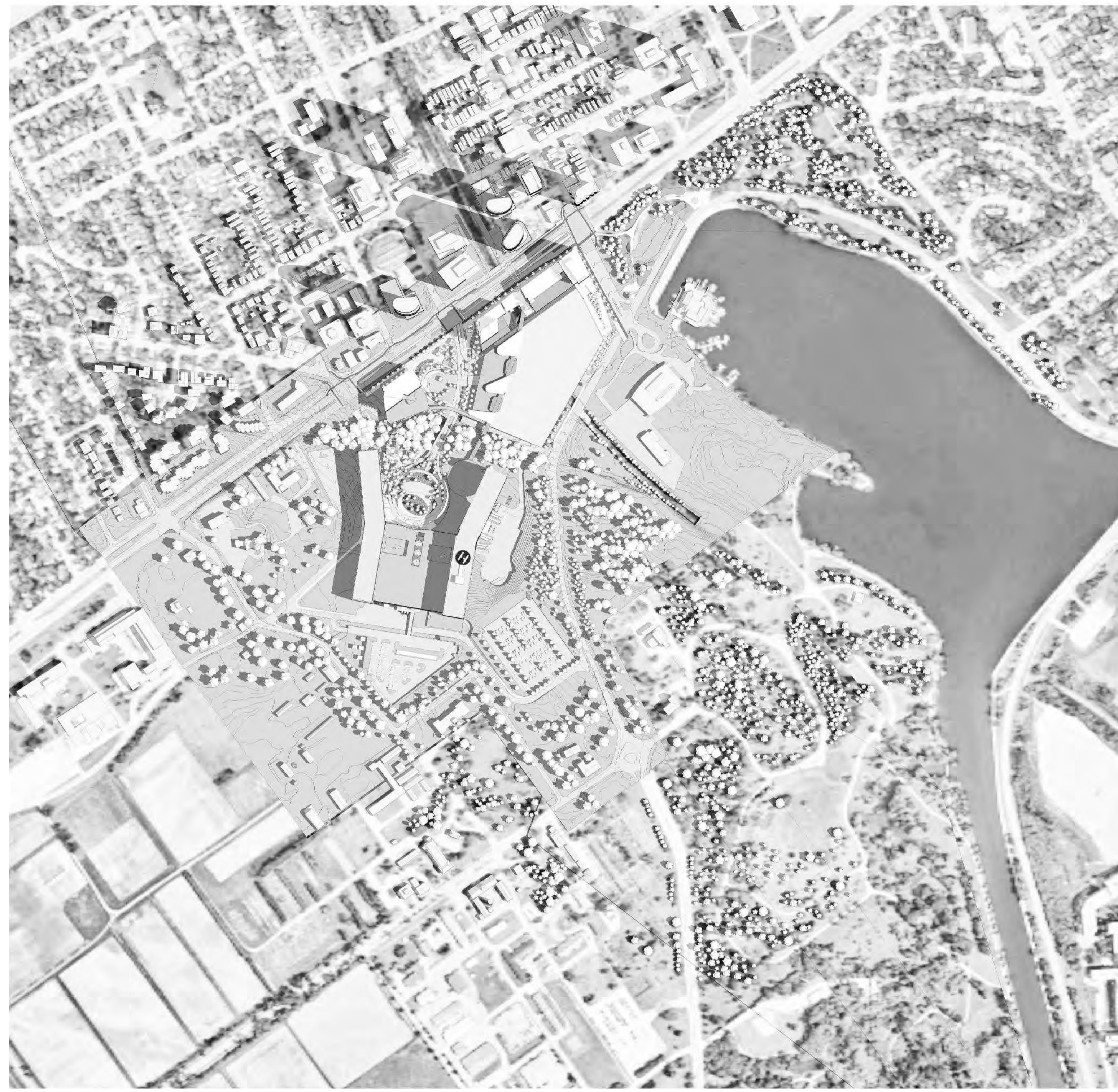


THE OTTAWA HOSPITAL - CIVIC CAMPUS REDEVELOPMENT PROJECT

STAGE 2

SUN & SHADOW STUDY - MARCH 1st





3 SUN & SHADOW STUDY - JUNE 1st @ 9AM 1:2000



4 SUN & SHADOW STUDY - JUNE 1st @ 12PM 1:2000



1 SUN & SHADOW STUDY - JUNE 1st @ 3PM 1:2000



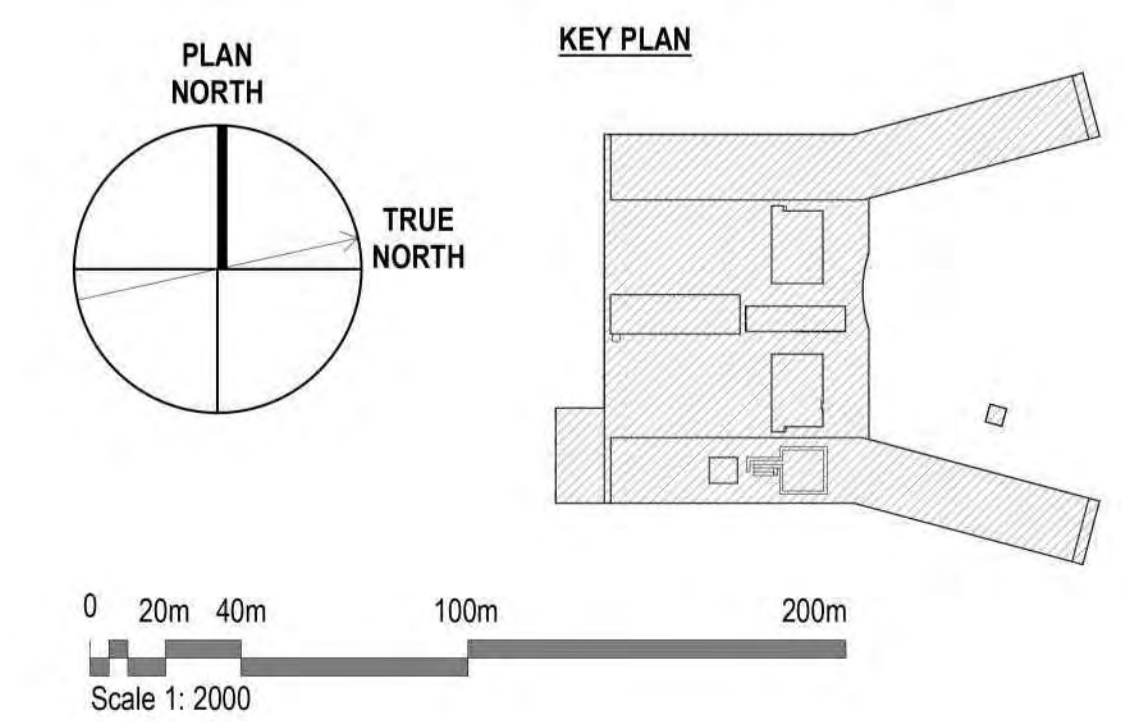
2 SUN & SHADOW STUDY - JUNE 1st @ 6PM 1:2000

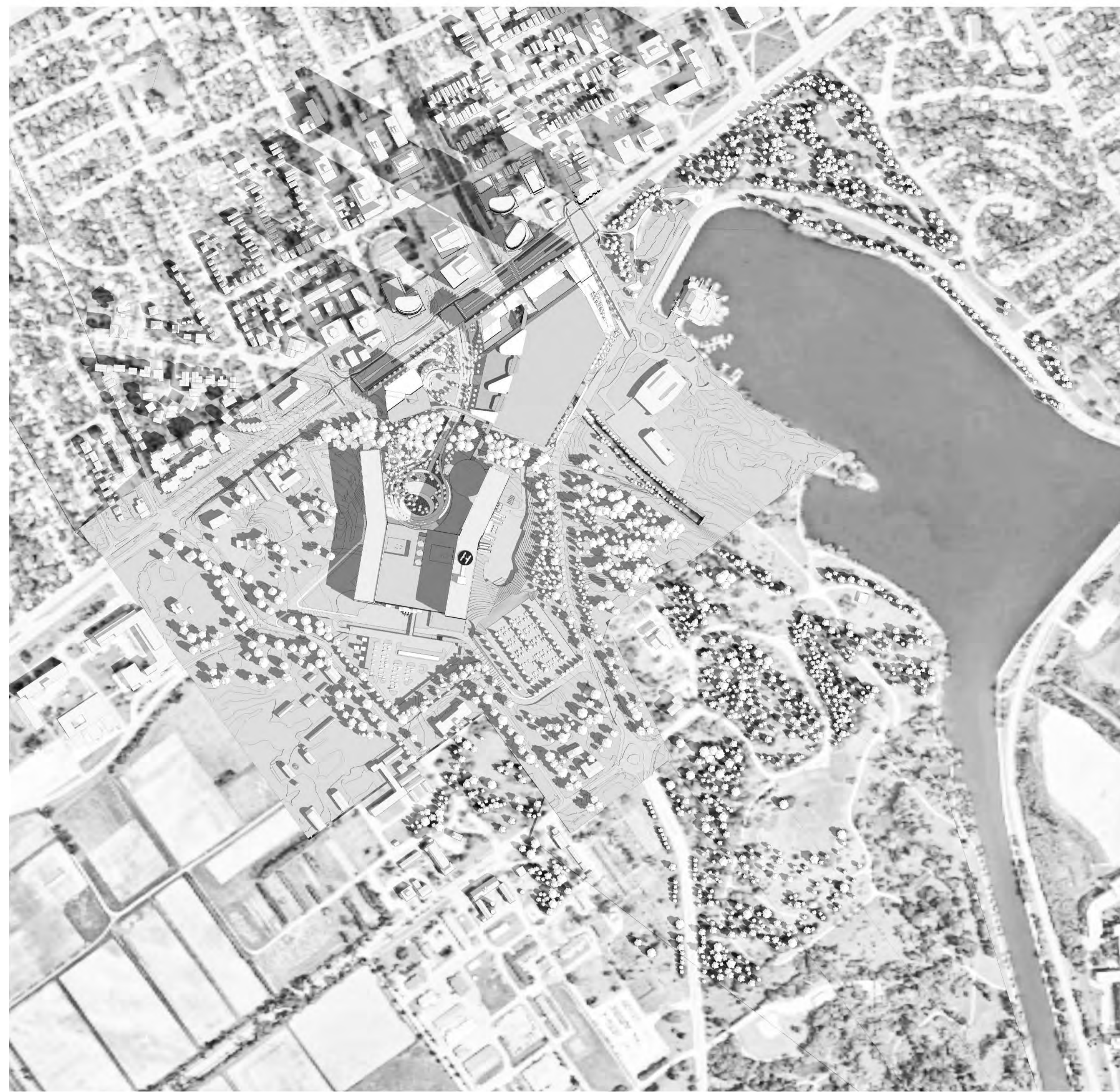


THE OTTAWA HOSPITAL - CIVIC CAMPUS REDEVELOPMENT PROJECT

STAGE 2

SUN & SHADOW STUDY - JUNE 1st





3 SUN & SHADOW STUDY - SEPTEMBER 1st @ 9AM 1
1:2000



4 SUN & SHADOW STUDY - SEPTEMBER 1st @ 12PM 1
1:2000



1 SUN & SHADOW STUDY - SEPTEMBER 1st @ 3PM 1
1:2000



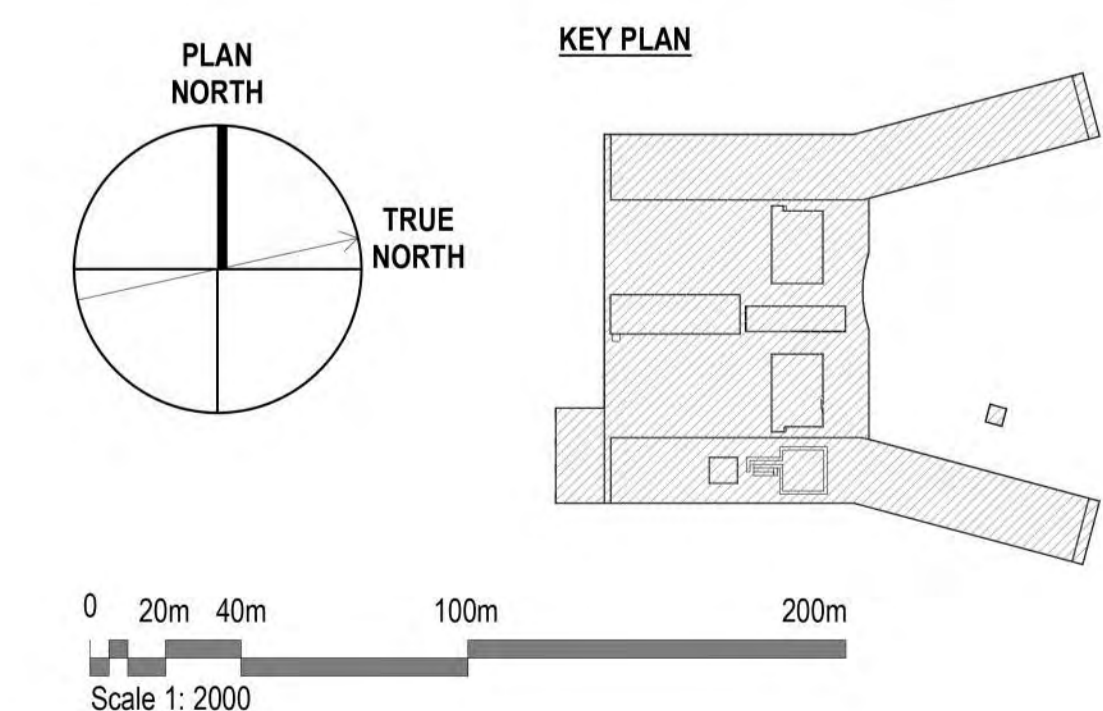
2 SUN & SHADOW STUDY - SEPTEMBER 1st @ 6PM 1
1:2000



THE OTTAWA HOSPITAL - CIVIC CAMPUS REDEVELOPMENT PROJECT

STAGE 2

SUN & SHADOW STUDY - SEPTEMBER 1st





3 SUN & SHADOW STUDY - DECEMBER 1st @ 9AM 1
1:2000



4 SUN & SHADOW STUDY - DECEMBER 1st @ 12PM 1
1:2000



1 SUN & SHADOW STUDY - DECEMBER 1st @ 3PM 1
1:2000



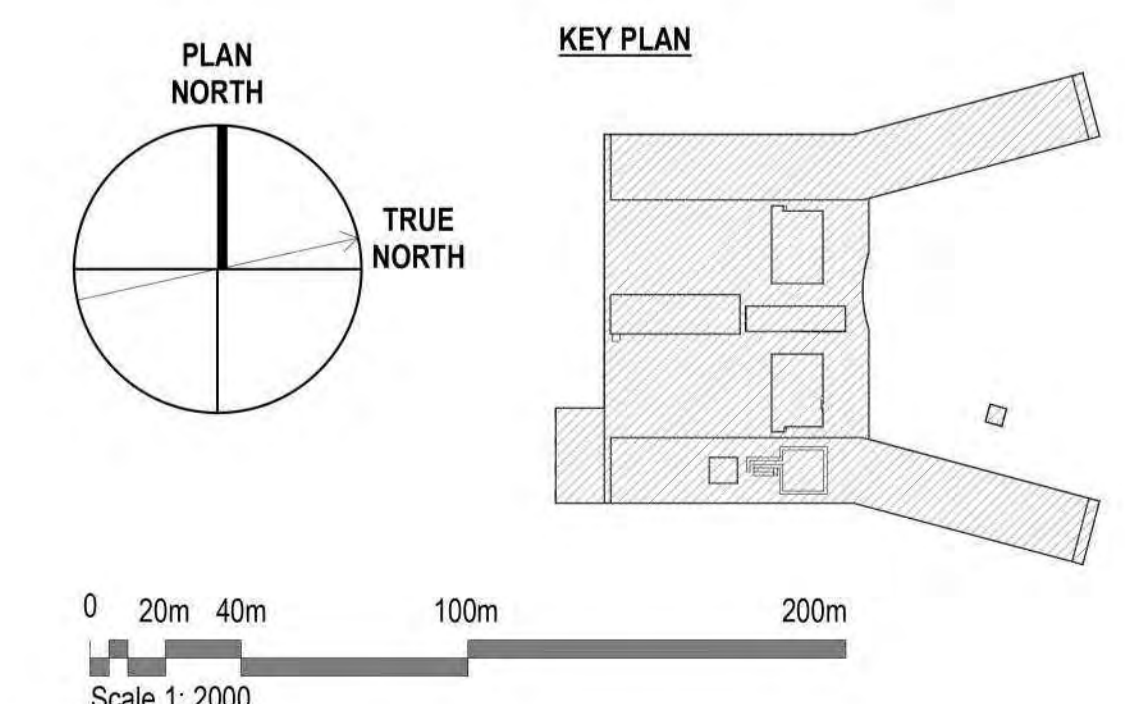
2 SUN & SHADOW STUDY - DECEMBER 1st @ 6PM 1
1:2000



THE OTTAWA HOSPITAL - CIVIC CAMPUS REDEVELOPMENT PROJECT

STAGE 2

SUN & SHADOW STUDY - DECEMBER 1st



APPENDIX D

Modelled Views (HDR Inc.)



view # 13a



view # 13b



13c



view # 13c

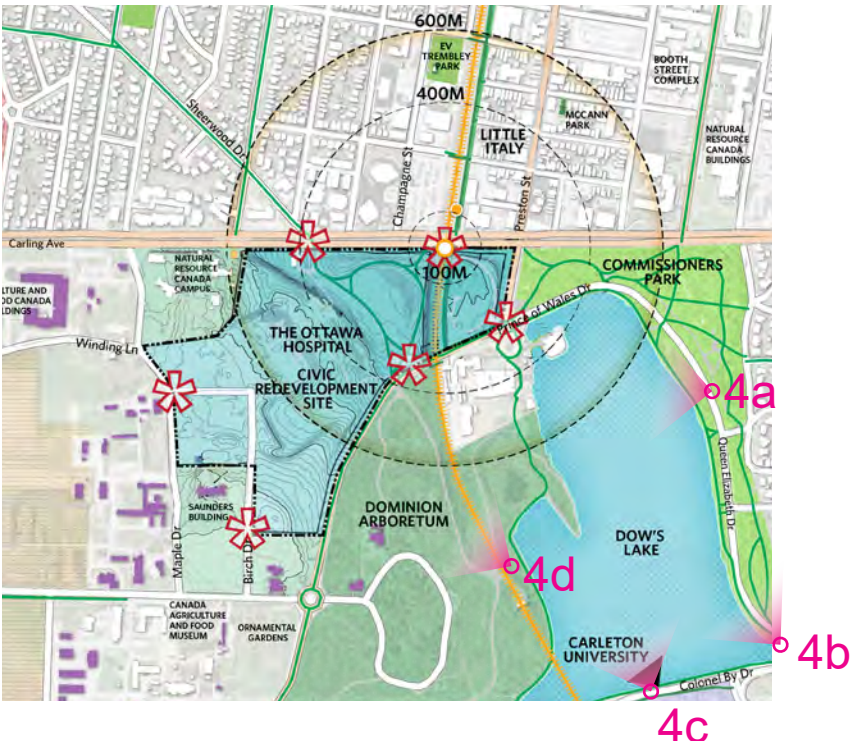




view # 4a



view # 4b



4c

4b



view # 4c

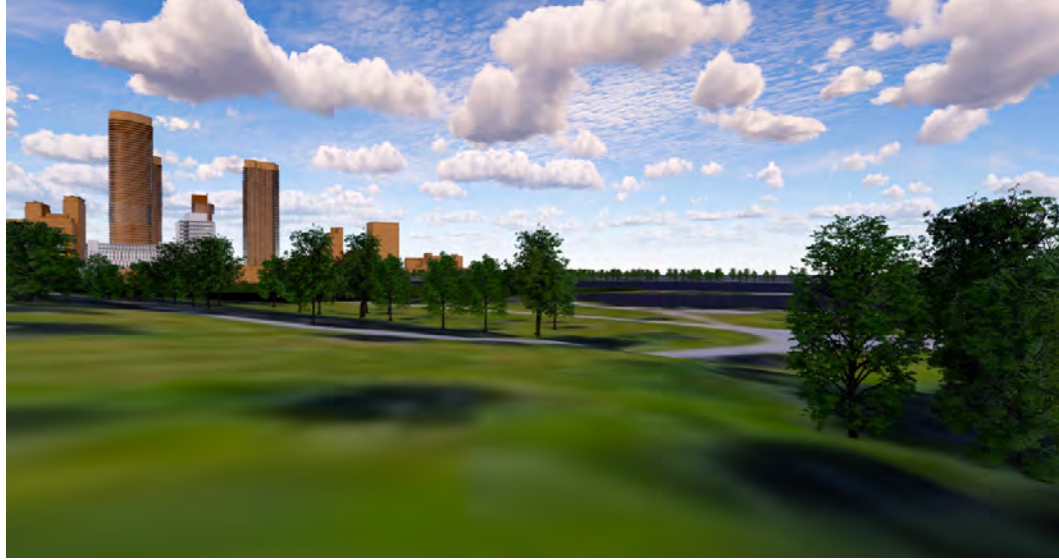


view # 4d



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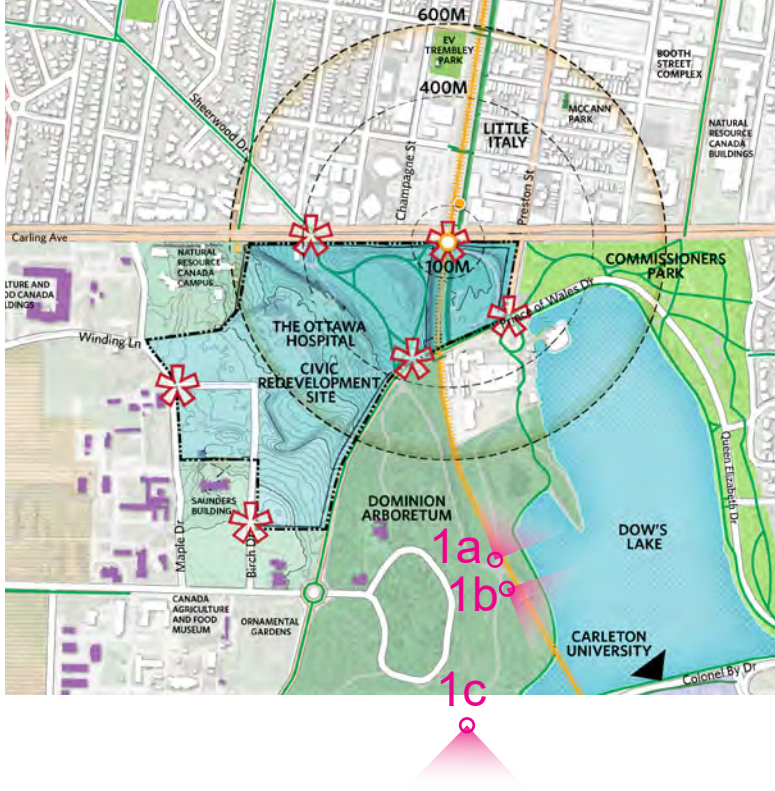




view # 1a



view # 1b



view # 1c



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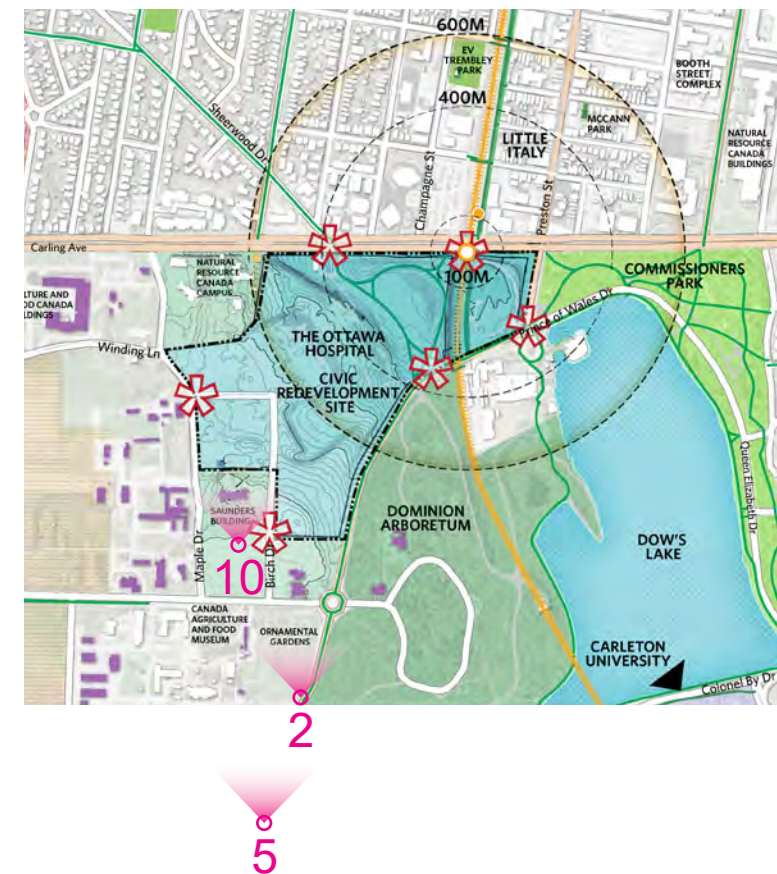
view # 2



view # 5



view # 10





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VIEW SOUTH FROM THE DOMINION OBSERVATORY CAMPUS (FOREGROUND)



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