



National Monument to Canada's Mission in Afghanistan

Program and Design Guidelines

March 2020



Canadian
Heritage

Patrimoine
canadien



NCC
CCN

Canada

CONTENTS

1.0 Introduction	1
1.1. The Commemorative Monument	1
1.2. Commemoration and Civic Design.....	2
1.3. Program and Design Guidelines.....	3
2.0 The Site and its Context	5
2.1. Location of the Monument.....	5
2.2. Canada's Capital Core Area and Confederation Boulevard	6
2.3. Institutions and other Landmarks in the Area	8
2.4. Other Monuments in the Area	10
2.5. Historical Development	13
2.6. Future Development Context.....	16
2.7. Current Characteristics of the Monument Site.....	29
2.8. Views Protection Considerations	39
3.0 Vision and Program	43
3.1. Background.....	43
3.2. Vision	43
3.3. Project Goal	43
3.4. Project Objectives	44
3.5. Guiding Principles.....	44
3.6. Program Elements	45
4.0 Design Guidelines	46
4.1. General Character of the Monument	46
4.2. Monument Placement and Extent	47
4.3. Access and circulation	48
4.4. Orientation and Key Views	49
4.5. Scale and Height	52
4.6. Materials and Components	54
4.7. Vegetation	55
4.8. Gatherings and Ceremonies	56
4.9. Other Activities	57
4.10. Site Grading	58
4.11. Solar orientation and Micro-Climate	59
4.12. Stormwater Management	61
4.13. Geotechnical and Soil Conditions	62
4.14. Site Utilities	63
4.15. Physical Comfort and Site furnishings	64
5.0 General Guidelines	65
5.1. Universal Accessibility	65
5.2. Lighting and Evening Experience.....	66
5.3. Seasonal Experience.....	67
5.4. Legibility.....	68
5.5. Approachability.....	69
5.6. Durability and Ease of Maintenance	70
5.7. Environmental Responsibility.....	71
5.8. Public Safety.....	72

1.0 INTRODUCTION

1.1. THE COMMEMORATIVE MONUMENT

These Program and Design Guidelines are intended to guide the finalist design teams in the second phase of the two-phase design competition to design and build a national monument dedicated to Canada's Mission in Afghanistan in Ottawa, Ontario, Canada. These Program and Design Guidelines were prepared for the National Capital Commission (NCC) by DTAH.

The National Monument to Canada's Mission in Afghanistan (NMCMA), which was announced May 8, 2014, will serve as a testament to the commitment and sacrifice of Canadian Armed Forces members, police officers, public servants and civilians who served in Canada's mission in Afghanistan. The Monument will also recognize the strong support offered by Canadians at home to those who served during the mission.

As indicated in the Request for Qualifications, the Monument will be prominently located at LeBreton Flats across from the Canadian War Museum, with views of Parliament and other key federal institutions, and at the gateway between Ontario and Quebec. This Site's landmark qualities include its prominence relative to the commemorative spaces within the Canadian War Museum, its physical presence relative to the War Museum's massing, as well as the Site's position relative to the Chaudière Crossing as a form of gateway between Ontario and Quebec.



1.2. COMMEMORATION AND CIVIC DESIGN

Commemoration and civic design are complementary activities that, when undertaken in unison, produce the rich and meaningful urban environments that mark great cities.

Commemoration is the act of recognizing people, events or ideas that hold meaning and high value for the community. Effective commemorations are those that have been located, programmed and designed to ensure their visibility, approachability, legibility and meaning.

In addition to their commemorative purpose, good monuments and memorials contribute to their environments. Not unlike the punctuation in a paragraph, monuments and other artifacts have long been used as commas, semi-colons and full stops to reinforce the syntax of the city, to clarify the many overlapping spatial systems, and to make them “readable” to those who live in and visit the city. Whether it is a major monument marking an important axial vista or a modest plaque embellishing a local park, a good commemoration “earns its living” by contributing to and supporting the environment of which it is a part.



Figure 1 The National War Memorial: Commemoration and Civic Design

1.3. PROGRAM AND DESIGN GUIDELINES

The purpose of this document is to assist the finalist design teams selected as part of the second phase of the National Monument to Canada's Mission in Afghanistan design competition in developing appropriate responses, and to provide design criteria for the evaluation of submissions. Rather than limiting possibilities by steering the expression in any particular direction, these guidelines should enrich the outcome by identifying influences inherent in the Site and its unique and evolving context.

The guidelines also set out the expectations and program requirements developed by the Monument proponents, and are consistent with Canada's Core Area Sector Plan, 2005.

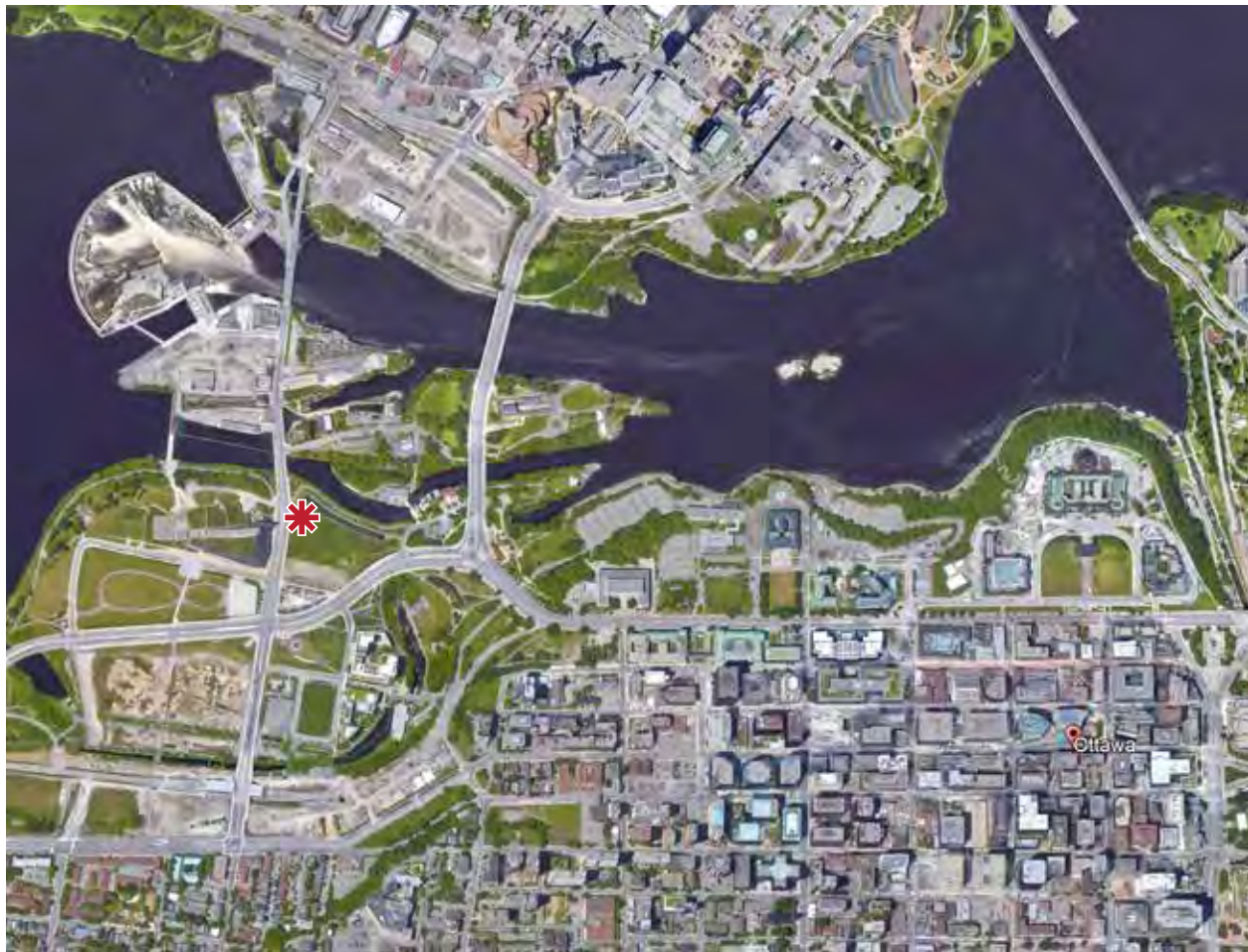


Figure 2 Location of the NMCMA Monument in the National Capital



Figure 3 The Monument Site within the National Capital

2.0 THE SITE AND ITS CONTEXT

2.1. LOCATION OF THE MONUMENT

Commemorative monuments are statements punctuating the urban fabric of the National Capital. Their role in the city is significant, as they reflect and give symbolic meaning to our values and our history. To be efficient in their role, monuments must stand out yet integrate with their surroundings. To achieve this, a thoughtful assessment of the urban planning context for this sector of the Capital is needed.

The Monument is to be located on a Site east of Booth Street across from the Canadian War Museum, near the Bronson Channel of the Ottawa River. The Site is just north of the Preliminary LeBreton Flats Master Concept Plan area, envisioned as a diverse residential community supported by retail and employment opportunities, designed as pedestrian-friendly, surrounded by lively and active parks and plazas, including the dynamic Aqueduct District, the Ottawa riverfront and a large destination park. The commemoration's location presents significant opportunities within a prominent location to meaningfully honour the legacy of Canada's Mission in Afghanistan.

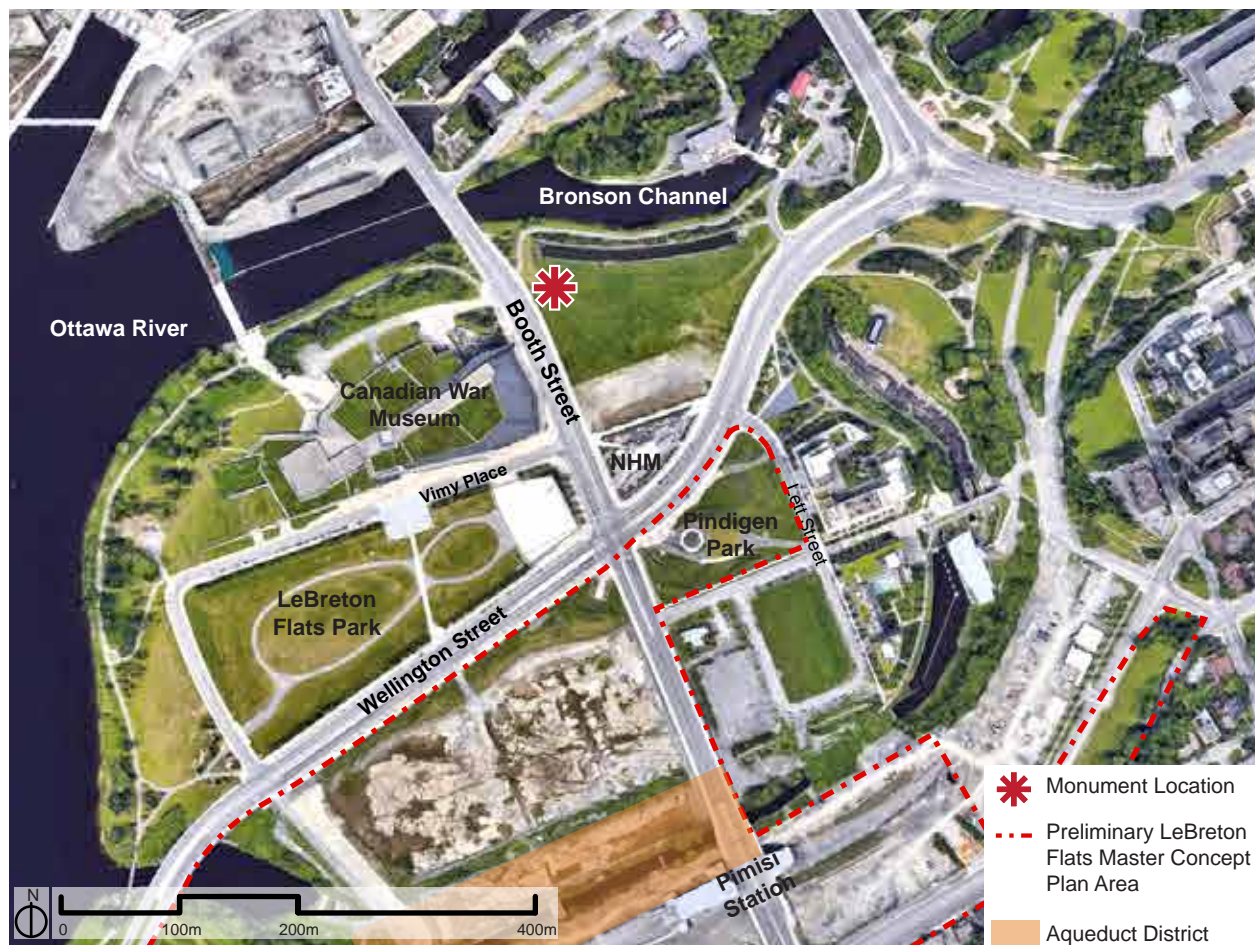


Figure 4 Location of the Monument

2.2. CANADA'S CAPITAL CORE AREA AND CONFEDERATION BOULEVARD

Canada's Capital Core Area hosts many of the nation's most important political and cultural institutions, as well as a rich diversity of national monuments and symbols. They reflect, celebrate and commemorate people, events and achievements that have significance and value for our country. These monuments, regardless of their commemorative theme, often become a permanent influential element in the urban landscape, capable of shaping the civic realm by uniting history, territory and collective memory.

In this respect, the National Monument to Canada's Mission in Afghanistan will greatly enrich the visitor experience of the Capital and will become an enduring symbol of commitment and sacrifice.

The Site selected for the NMCMA is located just west of the Judicial and Parliamentary Precincts and Confederation Boulevard. It is also part of the Islands and LeBreton North character area, as described in the Capital Core Area Sector Plan, 2005. The goal for the area is

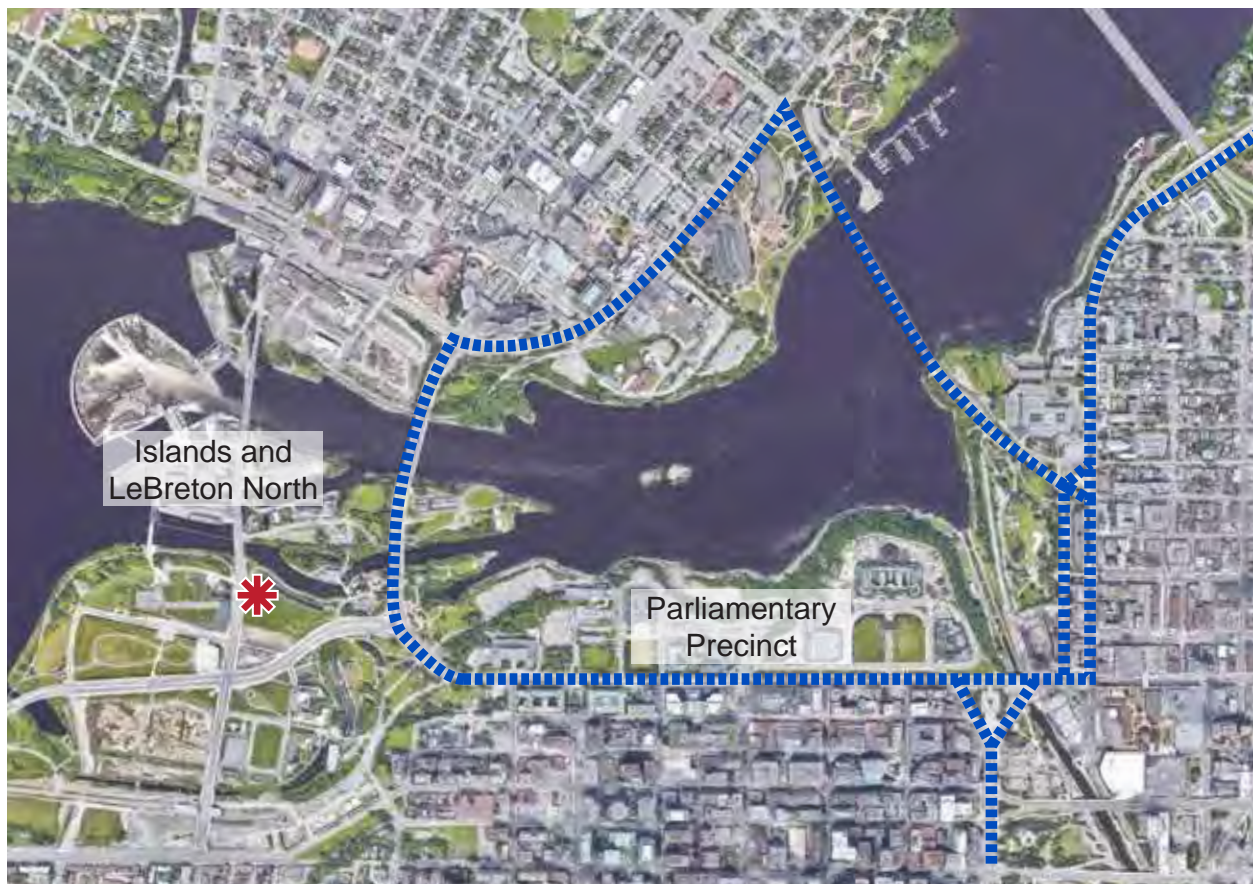


Figure 5 Location of Monument in relation to current Confederation Boulevard configuration

to celebrate its industrial, aboriginal and natural heritage, strengthen links between the downtowns of Ottawa and Gatineau and develop evocative architecture, programs and open spaces that create a unique public experience.

A key component of the core area is Confederation Boulevard, the Capital's ceremonial route linking many of the national attractions and symbols, including Parliament Hill and the Parliamentary Precinct, through a unified and distinctive aesthetic approach. As part of the LeBreton Riverside East Conceptual Master Plan included in this document, it is proposed that the widened esplanade characteristic of Confederation Boulevard be extended to Booth Street concurrent with the proposed future institutional development to be constructed south of the NMCMA Monument Site. The extension of the esplanade to Booth Street will assist in providing the Monument Site with increased visibility and pedestrian access adjacent to this ceremonial route.

Additionally the Site's position adjacent to the Chaudière Crossing to Gatineau, suggests that the Site may serve as a form of gateway between the provinces of Ontario and Quebec, for passengers traveling in either direction across the bridge.

Furthermore, the Monument Site is also immediately adjacent to the Ottawa River Pathway , a multi-use trail extending across the river frontages of Ottawa, further expanding the likely volume of visitors who may choose to stop at the NMCMA Site on route to other destinations.

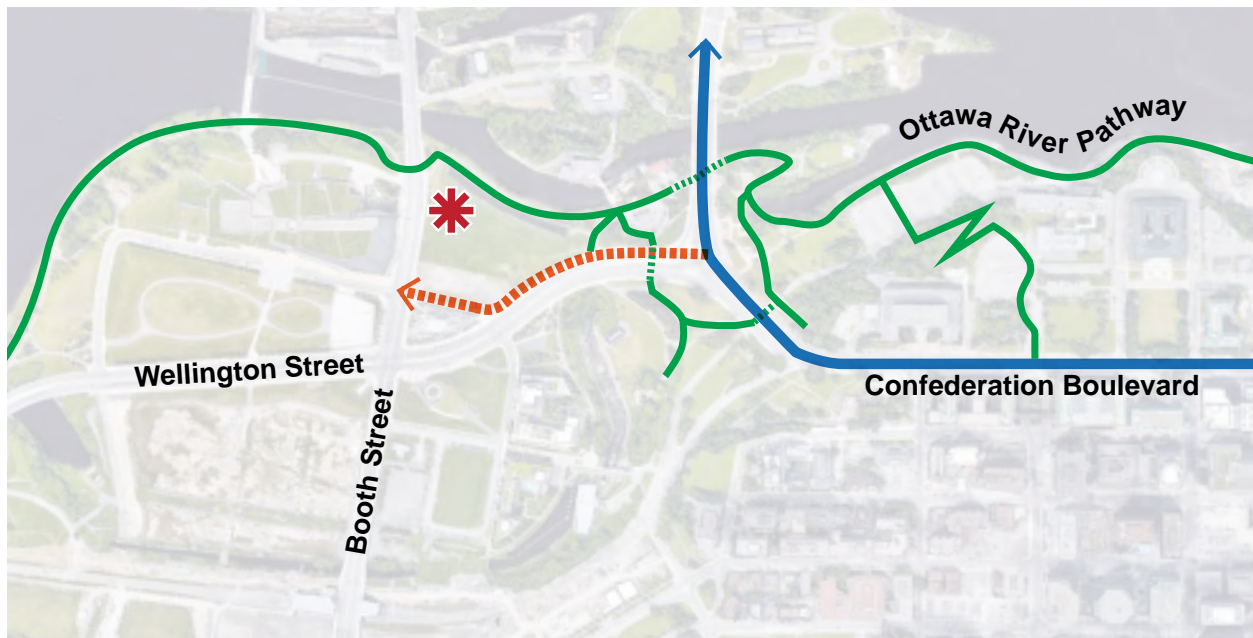


Figure 6 Location of Monument in relation to Confederation Boulevard (blue), Ottawa River Pathway (green), and extension of the esplanade (orange)

2.3. INSTITUTIONS AND OTHER LANDMARKS IN THE AREA

2.3.1. Canadian War Museum

Located on the southern bank of the Ottawa River, the Canadian War Museum opened its doors in 2005. A stunning architectural design, innovative exhibitions, diverse public programs and leading-edge scholarly content make it one of the world's most respected museological venues for the study and understanding of armed conflict. The theme of the museum's architectural design, "regeneration," evokes not only the impact of war on land, but also nature's ability to regenerate and to accommodate the physical devastation brought by human conflict.

2.3.2. LeBreton Flats Park

LeBreton Flats Park is located south of the Canadian War Museum and the Ottawa River. Serving as a popular festival park, LeBreton Flats Park is approximately 3.5 hectares in area, and can host gatherings of over 40,000 people. It is also connected to downtown Ottawa and Gatineau through well-served bus routes, the LRT and extensive multi-purpose pathways. Opened in 2007, LeBreton Flats Park is a key piece of the LeBreton Flats revitalization project.

2.3.3. Mill Street Brew Pub

The Thompson Perkins Grist Mill was built in 1841 as a grist and saw mill. It and an associated building were among very few to survive the great fire of 1900. In 1909 the former grist mill was converted for operation as a paper mill and continued to operate until about 1952. In 1969, restoration and stabilization interventions were undertaken to convert the old mill into a restaurant. The project was completed in 1972, and received an award of excellence from the Ontario Association of Architects.



Figure 7 LeBreton Flats Park during Bluesfest day (Source: Ottawabox.com)



Figure 8 Canadian War Museum (Source: NCC)



Figure 9 Mill Street Brew Pub (Source: Wikicommons)



Figure 10 Locations of Institutions and Other Landmarks in the Area

2.4. OTHER MONUMENTS IN THE AREA

The NMCMA will join a series of commemorative sites within the Capital Core Area, with beautification and commemorative interventions extending beyond the boundaries of Confederation Boulevard. They include physical links, entry routes, as well as visual and symbolic relationships within the Capital Core.

The NMCMA Site is part of a small group of commemorations present in the immediate area. Three monuments are located in the vicinity of the NMCMA, forming a group of Monuments aiming to attract visitors to this sector:

- the Canadian Firefighters Memorial along Wellington Street,
- the National Holocaust Monument, further described on page 13, south of the NMCMA Site and,
- the Royal Canadian Navy Monument by the Ottawa River at Richmond Landing.

In designing the NMCMA, finalist teams should keep in mind the adjacent commemoration sites.



Figure 11 Royal Canadian Navy Monument (Source: NCC)



Figure 12 Canadian Firefighters Memorial (Source: NCC)



Figure 13 National Holocaust Monument (Source: Studio Libeskind)



National Holocaust Monument

The National Holocaust Monument, entitled Landscape of Loss, Memory and Survival, ensures that the lessons of the Holocaust, as well as the remarkable contribution Holocaust survivors have made to Canada, remain within the national consciousness for generations to come. The Holocaust, one of the darkest chapters in human history, was the mass extermination of over six million Jews and countless other victims. In September 2017, the Government of Canada inaugurated the National Holocaust Monument at the corner of Wellington and Booth streets in Canada's Capital, south of the proposed NMCMA site.

The Monument features six soaring triangular concrete segments that create the points of a star — reminiscent of the yellow stars that Jews were forced to wear during the Holocaust. With principal access from Booth Street, the interior of the monument features a large gathering area for commemorative and educational activities, an interpretive exhibit and six murals depicting contemporary photographs of Holocaust sites. There is also a space for quiet reflection, as well as a terrace with views of the Capital's downtown core including Canada's democratic institutions.

The monument design fully integrates architecture, landscape, art, and interpretation and communicates themes of hardship and suffering while conveying a powerful message of humanity's enduring strength and survival.



Figure 15 National Holocaust Monument as seen from Booth Street (Source: Studio Libeskind)

2.5. HISTORICAL DEVELOPMENT

2.5.1. Site History

LeBreton Flats is part of the region identified as ancestral territory of the Anishinabe peoples. Directly connected to the Ottawa River (the Kitchissippi) and its tributaries, LeBreton Flats is part of a large homeland that contains a complex network of travel routes and sites for livelihood, habitation and celebration. The Indigenous history and heritage of LeBreton Flats is also connected to its place at the heart of a trade and communications network that stretched through eastern North America, and lasted thousands of years.

LeBreton Flats is the founding location of the city of Ottawa. Beginning with the landing of Loyalists in 1816 and the building of the Richmond Road to the west, it was the site that put the place that became Ottawa on maps. The first lot was patented to John LeBreton in 1819. For decades after that, the livelihoods of residents in the Flats and beyond were connected to the transportation and power potential of the Ottawa River.

By the 1850s, lumber companies run by lumber barons such as Henry Bronson, Ezra Butler Eddy and John R. Booth had established themselves on LeBreton Flats. The late 1800s saw the beginning of industrial development on the site which was to shape the Flats until the 1960s. The Canadian Pacific Railway freight terminal, the Eddy paper plant, Hydro power facilities and the City's first waterworks building were located on LeBreton Flats and the adjacent islands.



Figure 16 Aerial photograph of LeBreton Flats during winter, taken in 1962 (Source: City of Ottawa Archives)



Figure 17 Aerial photograph of LeBreton Flats after clearing and Ottawa River Parkway construction (Source: City of Ottawa Archives)

On April 26, 1900, the “Great Fire”, which destroyed much of Ottawa and Hull severely damaged LeBreton Flats. The community, both residential and industrial, rebuilt. The railway marshaling yards were also constructed at this time.

In 1962, the Federal Government acquired and cleared the buildings on LeBreton Flats to accommodate federal office buildings and the Ottawa River Parkway. However, due to federal government policy decisions, the federal offices were eventually located elsewhere in the cores of Ottawa and Hull. A number of planning efforts were undertaken in the next forty years to determine the future vocation for the Flats; however, none came to full fruition.

Since early 2001, the NCC has risk mitigated or remediated contaminated soil at developed and/or accessible areas of the site, and a new riverfront park and a national festival site were also developed.

Work on various types of infrastructure, including the realignment of the Ottawa River Parkway, was undertaken and completed in time for the opening of the Canadian War Museum in 2005.

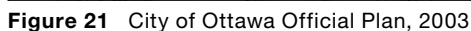
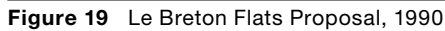
The riverside park to the north and west of the museum was completed in 2005. The interpretation areas along the multi-use pathway that runs through this park were installed in 2006. They recount the history of the Ottawa River and the lumber industry, and describe the significance and symbolism of the landscape surrounding the war museum. In 2007, LeBreton Flats Park became one of the Capital’s major festival and event sites.



Figure 18 Aerial photograph of LeBreton Flats from the east c. 2010 (Source: NCC)

11/11/2019

The LeBreton project was delayed as various parties lobbied for different programs for the site including a hockey arena, domed stadium and high-speed railway station. Finally, in 1999 it was settled that the Northern part of the LeBreton flats was to become the site for the Canadian War Museum. Debate over how the site and infrastructural improvements were to be funded resulted in significant delays. Consequentially, the Canadian War Museum – which was the first development of LeBreton Flats’ second phase – did not officially open until 2005, 20 years after the development was first discussed.



2.6. FUTURE DEVELOPMENT CONTEXT

2.6.1. LeBreton Riverside East Conceptual Site Master Plan

In preparation for the NMCMA design competition, the NCC developed a conceptual master plan for the entire property bounded by Booth Street, Wellington Street, and the Bronson Channel, in order to determine how the uses planned for the site, including the Monument and a future cultural institution, might occupy the property and relate to their surrounding built and landscape contexts. Furthermore, the Master Plan sets out the short and long-term landscape context of the Monument, and protects its reading as a commemorative landmark within its larger institutional and open space context.

In the following pages, a summary of this Master Plan process is provided in order to shed light on the long-term vision for the block, known historically as Block V but within this document is referred to as “LeBreton Riverside East”.

Short-term and long-term Demonstration Plans of the possible future development of the block have been prepared and are included in section 2.6.2. These figures further illustrate how planning and design principles and opportunities for the block could be implemented and to indicate the possibilities for the future setting of the Monument. Particularly important is a recognition that future recreational pathways could provide a wider range of access routes and prospects of the Monument.

No commitments have been made for pathway improvements or any other incremental landscape improvements apart from those that can be funded from within the Monument budget, and it is likely that comprehensive redevelopment of the public spaces of the block will be integrated with the building of a future cultural institution.

Site Organization

The diagram on the facing page illustrates the principal building and open spaces within the property.

The future cultural institution is sited to the southern part of the site with its primary (south) frontage facing on to a Plaza and across from the National Holocaust Monument.

Its east façade is on Wellington Street facing the Esplanade that connects the Wellington / Portage Node with the Plaza. It is on this frontage that servicing and parking access to the future cultural institution is assumed to occur, most likely at the northeast corner of the proposed building footprint, accessed discretely from Wellington Street in a manner similar to the Library and Archives Building further east along Wellington Street.

The west frontage of the future cultural institution faces the Canadian War Museum across Booth Street and is canted away from the street as it extends north, to form a wedge-shaped space that is conceived as a “garden” that opens up views toward the Bronson Channel and the Monument Site.

The northern part of the site is conceived as a picturesque park area with informal pathways that will offer additional approach routes and views to the Monument Site. It is suggested that the future cultural institution be designed to integrate with this parkland setting.

The Intersection of Vimy Place and Booth Street is seen as “The Four Corners”- similar to a “hinge” that joins the War Museum, the stage of LeBreton Flats Park, the National Holocaust Monument principal entrance and the future cultural institution.

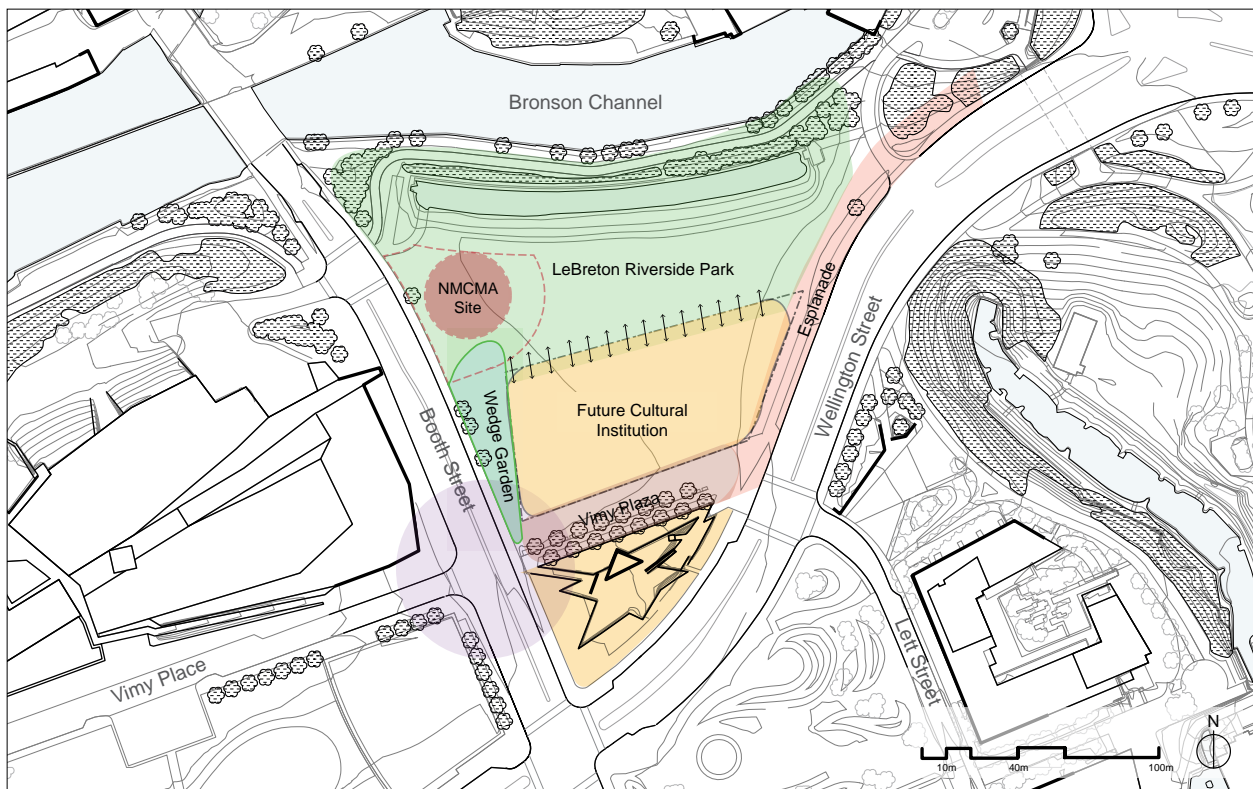


Figure 22 Diagram of Site Organization

Built Form Considerations

The future cultural institution's built form is shaped by the impact of the view corridor restrictions, and the role of the building's distinct frontages with respect to the Site's context. In all instances the footprint size illustrated in this document represents the maximum build-able footprint area of the institution.

The maximum building height is defined by the Viewpoint 16 viewshed to Parliament Hill. Two distinct height areas are created, as noted in the diagram below. Desirable views to and from the Canadian War Museum and the Monument Site further refine this footprint.

The development boundary has four distinct frontages. The south frontage plays an important role in the entry and circulation of the building - fronting onto a public Plaza and relating in alignment to the entrance frontage of the Canadian War Museum. The east and west frontages relate more directly to their flanking public streets - the east addressing Wellington and including servicing entry adjacent to a vehicular drop-off, and the west fronting onto a garden. The northern frontage is imagined as porous and landscape-focused.



Figure 23 Building drop-off at Library and Archives Canada Building

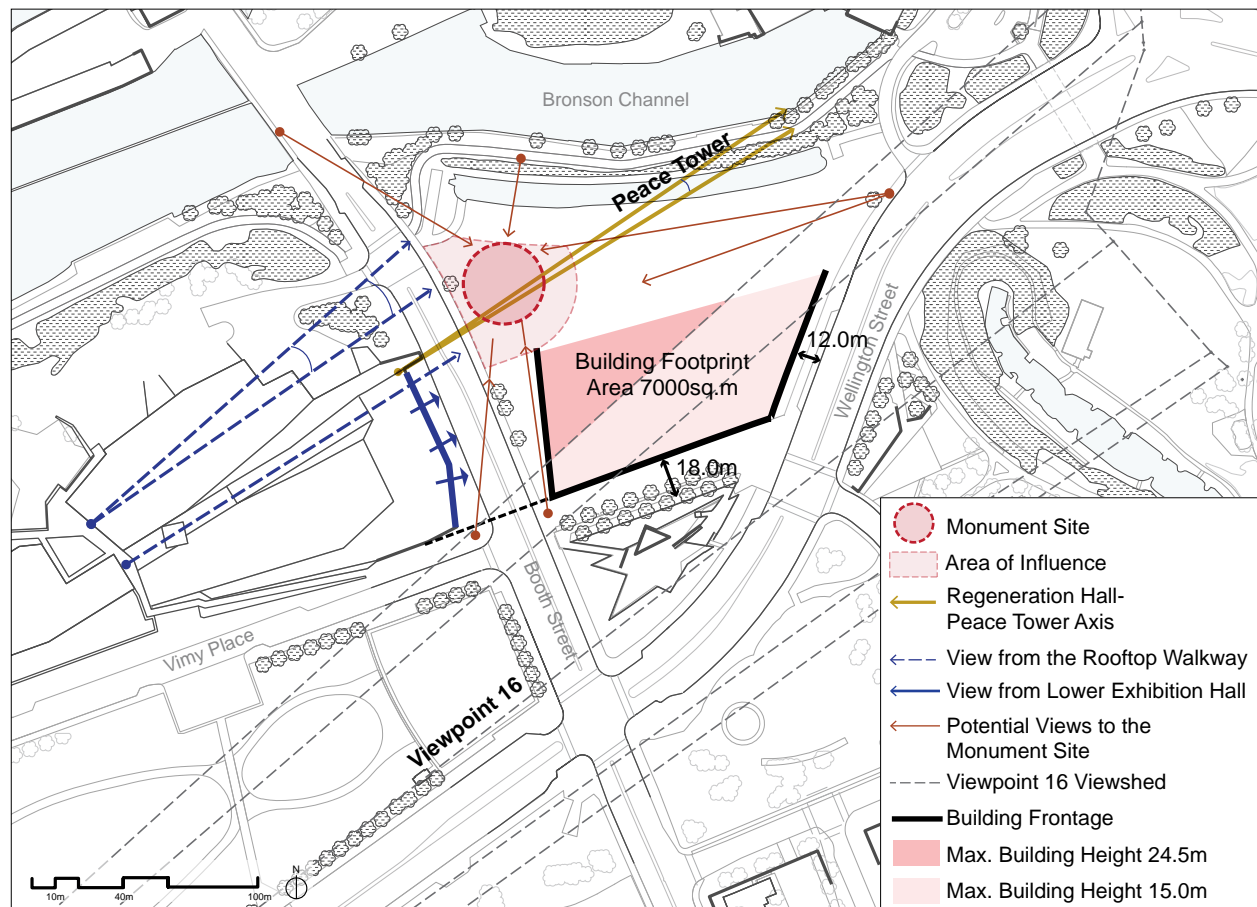


Figure 24 Built Form Considerations

Expanding the Pedestrian Network

The Esplanade continued along Wellington Street extends the design language of Confederation Boulevard to and through the Site, terminating at the Plaza, north of National Holocaust Monument.

Proposed future pedestrian pathways connect the Esplanade with the Ottawa River Pathway, Booth Street and the Monument Site.



Figure 25 Wellington Street Esplanade



Figure 26 Ottawa River Pathway

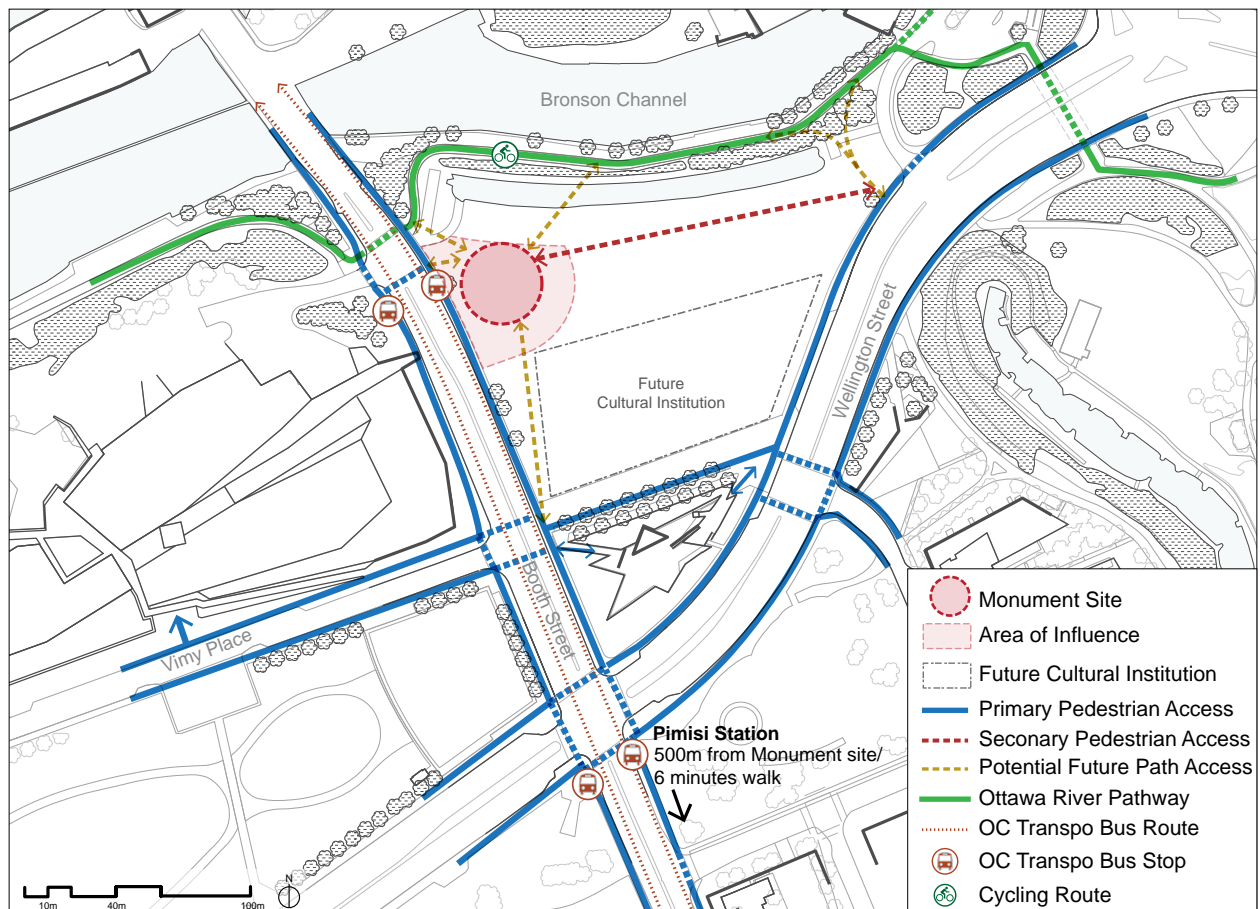


Figure 27 Existing and Potential Pedestrian and Transit Connections

Open Space and Place-making Considerations

A collection of four new public spaces are suggested within the Master Plan, each with a distinct role and character.

LeBreton Riverside Park (a) is intended as an expansion of River Landscape onto the Site. Characterized by open undulating grass with a high branching tree canopy, LeBreton Riverside Park is intended to accommodate a pedestrian path connecting Wellington Street to Booth Street and the Monument Site. It is intended that this landscape is framed by a sympathetic, porous facade of the future cultural institution to the south, allowing views onto LeBreton Riverside Park from the interior of the building.

The Booth Wedge Garden (b) is an expansion of Booth Street's public realm to the east, and includes both planting as well as seating opportunities flanked by the west facade of the future cultural institution. With respect to planting, it is imagined to include decorative plantings that are relative low, so as to not disrupt the view from Booth/Wellington to the Monument. An additional diagonal pedestrian pathway from Booth/Vimy to the Monument is also imagined, creating the wedge.

Vimy Plaza (c) is imagined as an expansion of the esplanade connecting Wellington Street to the Canadian War Museum. Characterized by a continuous hard paved surface with regularly spaced trees, it is anticipated to serve as the primary entry landscape for the new cultural institution, which in turn presents its most transparent and welcoming facade onto the Plaza. Provision for ceremonial vehicular access through the Plaza from Wellington Street to Booth Street is also assumed.

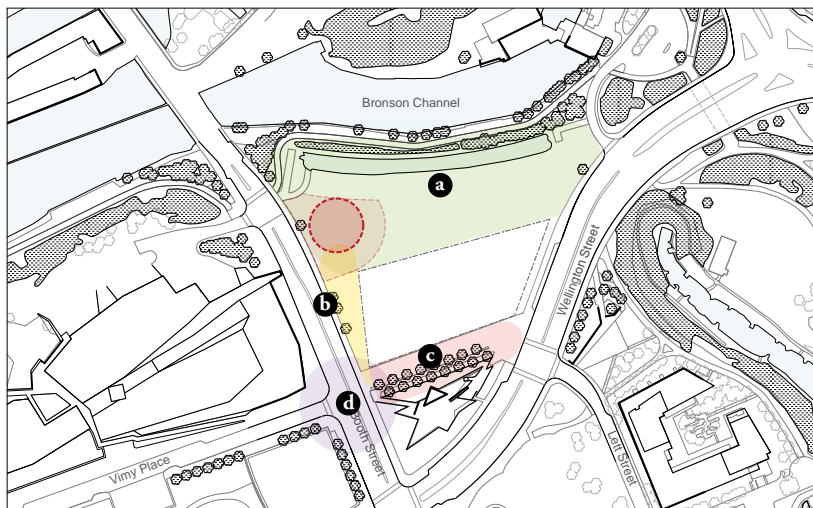


Figure 28 Diagram of New Public Spaces



Figure 29 Precedent for LeBreton Riverside Park



Figure 30 Precedent for Wedge Garden



Figure 31 Precedent for Vimy Plaza

The Four Corners (d) reflects the need to recognize the growing cultural importance emerging at the intersection of Booth / Vimy / Esplanade intersection. From the Four Corners, access is provided to the main entrance to the National Holocaust Monument, the main entrance of the Canadian War Museum, and as a direct route to the NMCMA Monument and to the future cultural institution. Furthermore the primary tourist bus drop-off for the War Museum is on Vimy Place, and is likely to continue to handle a large proportion of private bus drop-off for the surrounding institutions and commemorations. A light-controlled pedestrian crossing for safe pedestrian movement may need to be considered.

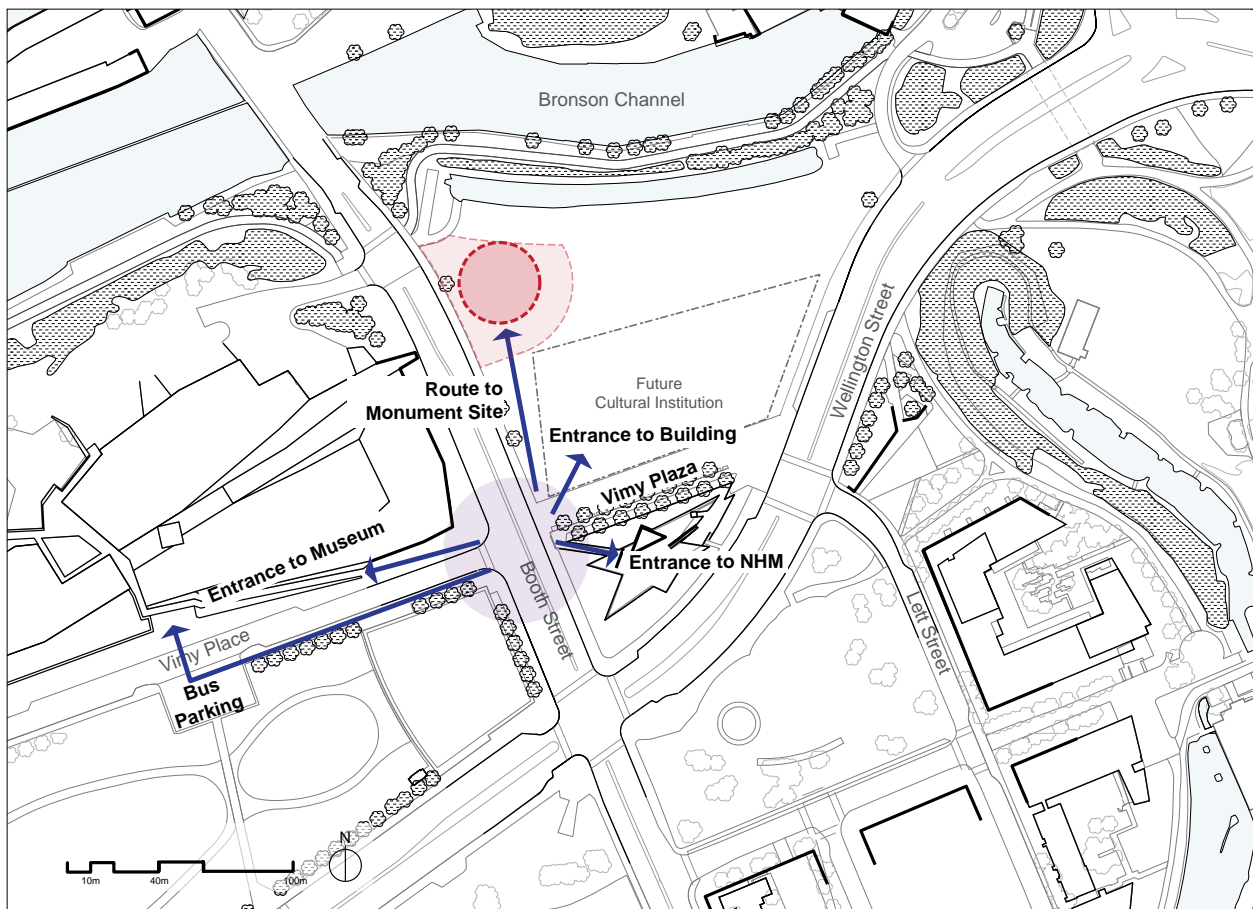


Figure 32 Diagram of the Four Corners

2.6.2. Demonstration Plan

The illustrative Demonstration Plan, pages 24 and 25, shows in greater detail the possible ways the public spaces of the block may be elaborated:

Vimy Plaza is conceived as an urban square that acts as forecourt to the future cultural institution, illustrated here as a paved pedestrian space with regular tree planting, spaced to accommodate occasional service vehicles and “ceremonial” vehicle drop-off / pick-up. While it is initially intended that ceremonial access/egress be from the light-controlled Wellington / Lett intersection with pedestrian only access to Booth Street at Vimy Place, the plan allows for flexibility in the placement of the main entrance. The location of the main entrance will depend on the program of the future cultural institution and may evolve as the building is being realized.

Vimy Plaza is spatially defined on its north side by the façade of the future cultural institution (max height: 24.5m) that is aligned with the south-east corner of the Canadian War Museum, extending the architecturally powerful built form across Booth Street. It is assumed that the principle entrance(s) to the future cultural institution will be from Vimy Plaza.

The Wellington Street Esplanade and improvements to the Wellington / Portage Node are important contributors to extending a formal, dignified pedestrian route to the Canadian War Museum and the future cultural institution, as well as encouraging active transportation in the Core Area. The Demonstration Plan illustrates the Esplanade terminating at the Booth Street crosswalk at the west side of Vimy Plaza.

It is intended that the future cultural institution have a strong yet welcoming east façade, including provision for a building entrance off of Wellington Street. The curb-cut drop-off and service vehicle crossing of the Esplanade should be designed and managed discretely, (similar to the Esplanade at the Library and Archives Building as seen on page 18).

The Wedge Garden is spatially defined by the Booth sidewalk / cycle path and the west façade of the Cultural Institution. The building face is angled away from Booth Street to bring the river landscape visually closer to the Plaza and to open up the view towards the Afghanistan Monument Site. This provides for an additional pedestrian pathway, aligned with the building face, that connects from the Plaza to the Parkland and the Monument Site, away from the busy traffic of Booth Street. A building overhang of the pedestrian path that maintains the view, could be considered.

The triangular planting bed is suggested as a decorative garden that can accommodate seasonal plantings and floral displays that are visible from both the street and the interior of the War Museum's large Exhibition Hall.

The Building face of the Cultural Institution on Booth is suggested as an architecturally similar extension of its south elevation, possibly including a corner entrance, and is "in conversation" with the War Museum, across the street.

LeBreton Riverside Park is conceived as part of the riverside park system extending westwards behind the War Museum, eastwards along the foot of the Parliamentary and Supreme Court escarpments and southwards – across Wellington Street – where it frames the entrance sequence into the urban Core.

The dimensions of LeBreton Riverside Park as now proposed enable a large "window" onto the east side of the War Museum and the Remembrance Hall tower as well as the Monument Site, particularly from vantage points on Wellington Street when approaching from the Wellington / Portage Node. Conversely, it allows views to Parliament Hill from Remembrance Hall and the lower Exhibition Hall of CWM as well as from the Monument Site.

The design approach reflected in the Demonstration Plan is picturesque and related to the Ottawa River, in contrast to the formal and regular patterns associated with the Wellington Street frontage. This is applied specifically to increasing the connectivity of pathways and enriching the sequential visual experience.

The Demonstration Plan introduces a new east-west pedestrian pathway connecting Wellington Street Esplanade with Booth Street along the bank of the stormwater pond, providing an eastern approach to the Monument Site and intersecting with further paths to Booth Street and the Plaza.

The Demonstration Plan also illustrates possible alterations to the Pond, regrading of its south bank and the introduction of a bridge connecting the Ottawa River Pathway with other pathways, south of the stormwater pond thereby increasing the potential for further links to the Monument Site.

The interface of the park with the north side of the Cultural Institution offers many landscape and architectural possibilities. Whether through the insertion of a courtyard or another means, the integration of the indoor and outdoor realms along the north frontage of the cultural institution is desirable.



Figure 33 The Demonstration Plan (short-term)



Figure 34 The Demonstration Plan (long-term)

2.6.3. Other Planned Future Developments

Building LeBreton: LeBreton Flats Redevelopment

The Building LeBreton project sets the vision for the renewal and reinvigoration of LeBreton Flats that will change how Canadians live, work and play in their cities. Setting a bold carbon neutral standard, the resulting Master Concept Plan intends to guide development over the next 25 to 35 years, laying a framework for how the public and private sector will work together to rebuild LeBreton Flats under the direction of the National Capital Commission. Driven by seven guiding principles, the Building LeBreton project embraces the role of LeBreton Flats as a part of the nation's capital, a destination for all, and a place for Ottawans to call home.

While the Monument Site is neither part of the Building LeBreton project nor located in the area, it has an important relationship to the new development as it is located just north of the area. The Monument will eventually become part of a much larger, vibrant LeBreton Flats community.

The Building LeBreton project will be grounded in a strategic implementation approach supported by market feasibility.



Figure 35 Building LeBreton Master Plan (Image Source: LeBreton Flats Master Concept Plan)

Four unique districts define the LeBreton Flats Master Concept Plan:

- The Aqueduct District: A vibrant cultural hub and entertainment district spilling out onto public space along the two aqueducts, part of the historic Ottawa Waterworks Complex.
- The Flats District: A predominantly residential community defined by intimate, pedestrian-oriented streets and a variety of housing types.
- The Albert District: A mixed-use main street neighbourhood anchored by the future Ottawa Public Library and Archives to the east and a potential event centre or major facility to the west, the Albert District provides space for homes and offices, as well as shops and services along Albert Street.
- The Park District: The Park District combines the community's industrial heritage with its defining natural elements, creating a unique park and public realm experience that will draw visitors from near and far to the western end of the community.



Figure 36 Building LeBreton Districts (Image Source: LeBreton Flats Master Concept Plan)

Claridge Homes East Flats

The East Flats development project proposes to add 164,500 square metres of floor space along Lett and Booth streets, northeast of the Pimisi LRT Station on Booth Street. The proposal, currently seeking approval, includes affordable housing, a food store and commercial space.

Ottawa Public Library and Archives

This public-facing civic institution will be welcoming and informative, combining library and archival resources including 425,000 works of art, 22 million books, and 3 million photographs. The building will include a sky-lit Town Hall gathering space, a multi-purpose auditorium, Discovery Centre for children, Genealogy Centre, Creative Centre, Design Studio, Digital Production Centre, collaboration labs, maker spaces, reading rooms, meeting rooms, and cafés.

Zibi Development

It is anticipated that the Zibi Development will include approximately 330,000 square metres of development on Chaudières and Albert islands and the Gatineau shoreline. Almost two thirds of that development will be residential, with the balance to be split between retail, hotel, community and cultural space.



Figure 37 Claridge Homes East Flats (Image Source: Claridge Homes / Urban Strategies)



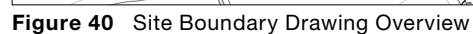
Figure 38 Ottawa Public Library and Archives (Image Source: Dezeen)



Figure 39 Zibi Waterfront Community (Image Source: Windmill Developments)

2.7.1. Boundaries and Existing Surface

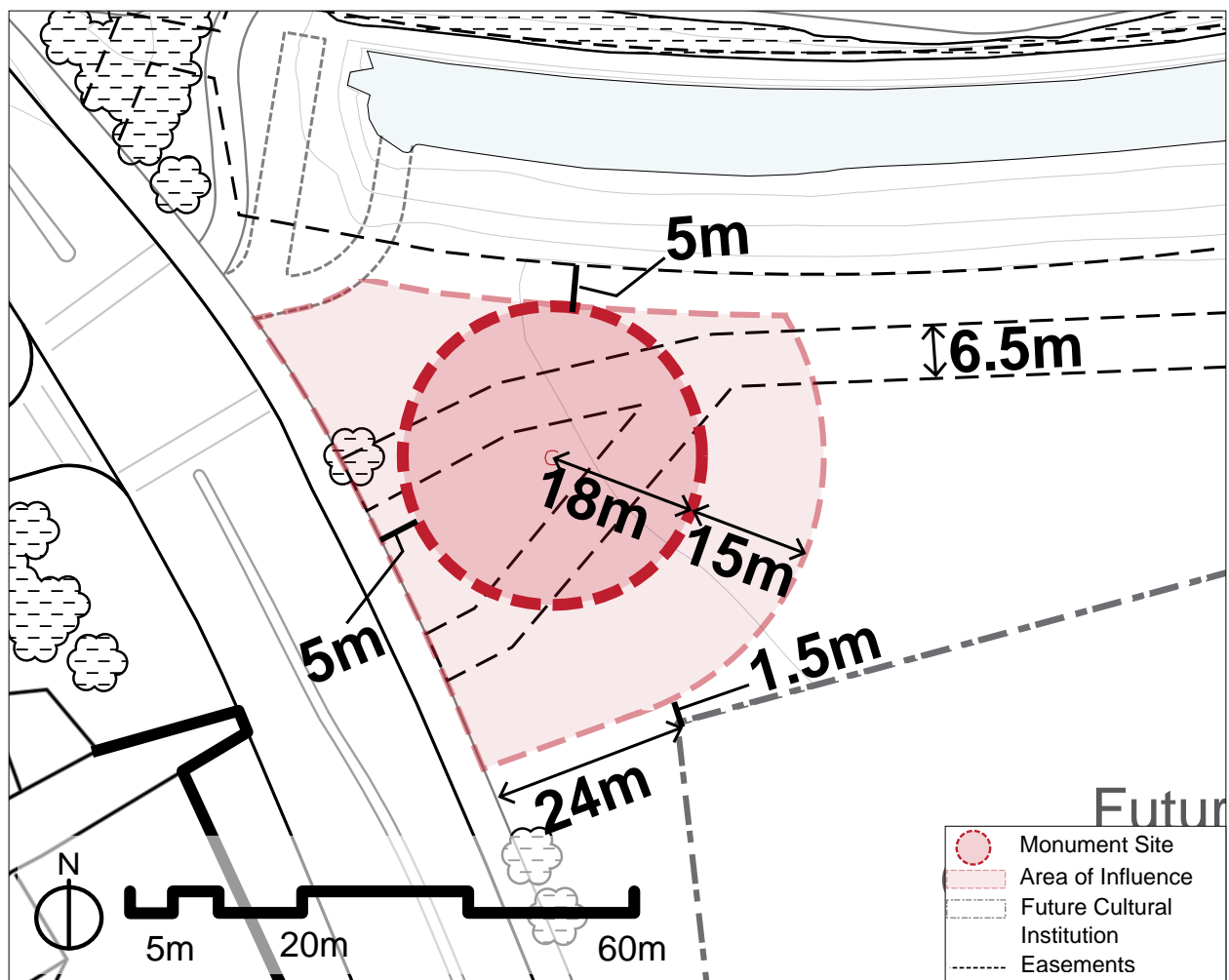
This Area of Influence includes a 5-metre strip of land fronting onto Booth Street, as well as a 15-metre zone beyond the south and western portions of the Competition Site, as illustrated on this page. Any improvements proposed within the Area of Influence must be included in the capital cost budget for the monument. No expansions / overhangs beyond the Area of Influence are permitted.



North of the Site exists a 5-metre easement pertaining to the maintenance of the stormwater pond. Additional below-grade easements and surface access pathways for the pond infrastructure are outlined in Sections 2.7.5. and 2.7.7.

Competitors are to consider both the near-term and long-term site conditions in their proposals.

Currently, the Site is a grassy plain which extends between Booth Street and Wellington Street, and south to the walkway of the National Holocaust Monument. As stated elsewhere in this document, in the longer-term the lands immediately south of the Monument Site will be home to a future cultural institution, the development timeline for which is unknown.



2.7.2. Topography

The Monument Site is relatively flat, sloping approximately 2% down toward Booth Street, with more significant grade changes only occurring immediately adjacent to the stormwater management pond at the northern edge of the property and outside the Monument Site boundary. The topographic relationship to Booth Street and the Canadian War Museum is also relatively level. The Chaudière Bridge Crossing provides a vantage point into the Site, as does the bridge adjacent to the Pimisi Light Rail Station south on Booth Street. At the eastern property boundary, the area adjacent to Wellington Street is also elevated relative to the Monument Site.

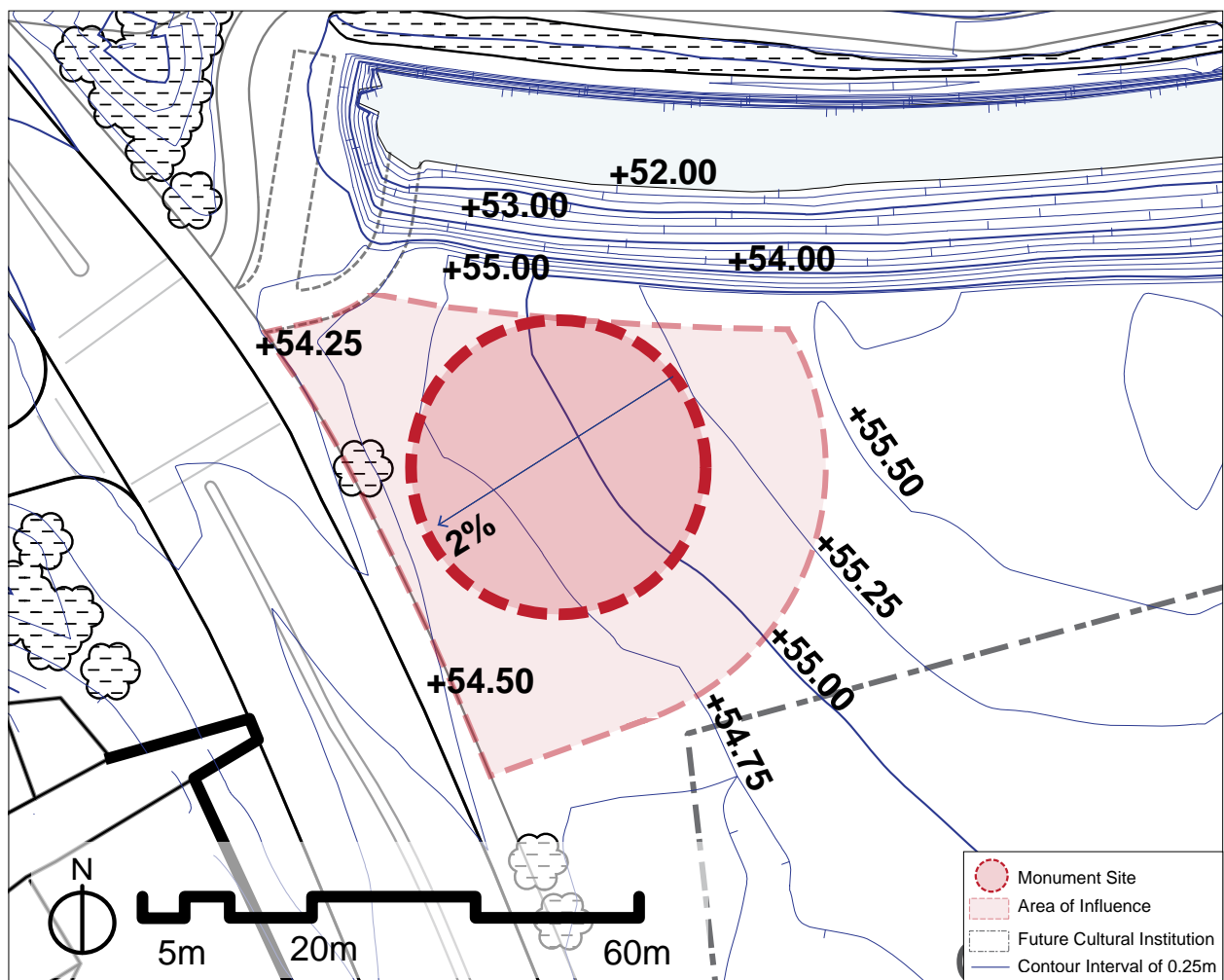


Figure 42 Site Topography

2.7.3. Roadways and Public Transit Access

The closest public right-of-way to the Monument site is Booth Street, which extends across the Bronson Channel to Gatineau and accommodates bus service as part of the OC Transpo system as well as pedestrian sidewalks on both sides of the street. The present OC Transpo Bus #85 connects Pimisi Light Rail Station to Gatineau, and stops immediately adjacent to the Monument site. A signalized pedestrian crossing exists immediately northwest of the Monument site, providing continuity to the Riverfront Pathway while also serving the Canadian War Museum's servicing access drive. Any service and emergency vehicle access required for the Monument would come from Booth Street using the access road provided for the stormwater pond (see section 2.7.5.).

Pimisi Light Rail Station is approximately 600m from the Monument site, a 6-10 minute walk along Booth Street.



Figure 43 Booth Street looking south

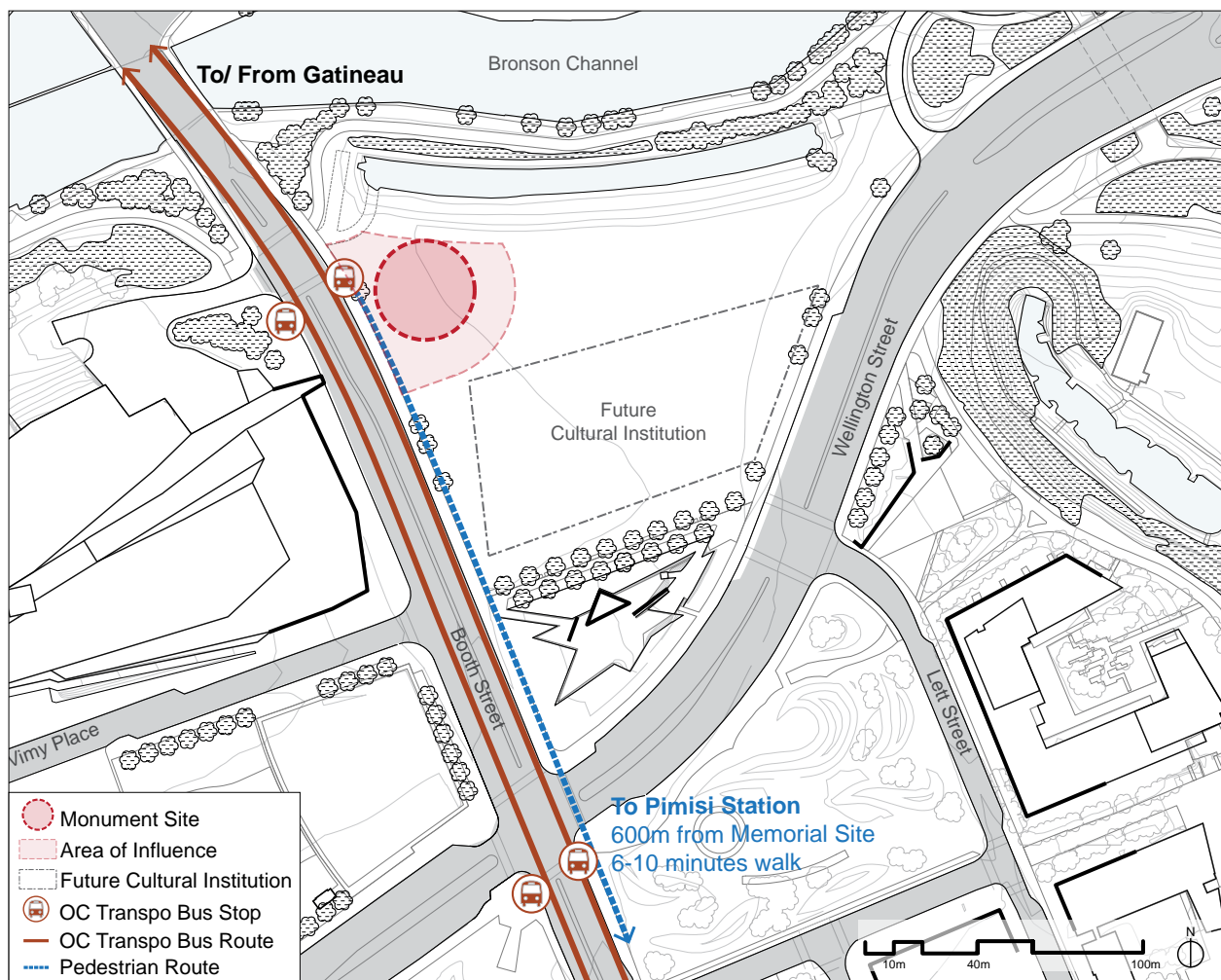


Figure 44 Transit Access

2.7.4. Pedestrian and Bicycle Access

The Monument site is afforded good pedestrian and bicycle access in part from its proximity to the Riverfront Pathway, which is a prominent cycling, running and walking route and part of the Trans Canada Trail. In addition cycle lanes are provided on Booth Street in both directions.

Pedestrian sidewalks are also prevalent surrounding the site, including on Booth and Wellington Streets, and immediately north of the National Holocaust Monument.

Informal pedestrian connectivity between Wellington Street to the Monument site and further to Booth Street and Chaudière Crossing is accommodated by traversing the existing property's grassy plain.

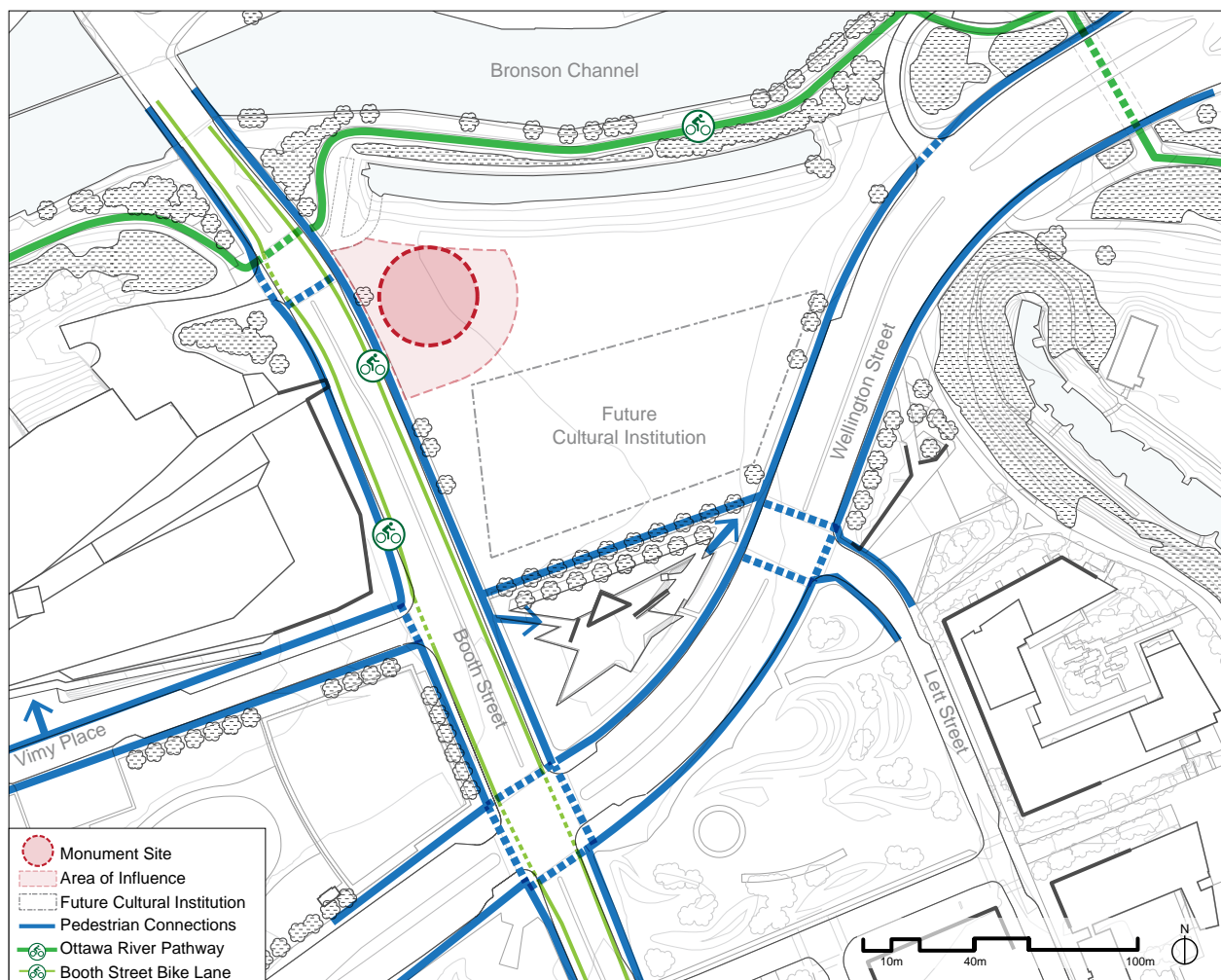


Figure 45 Pedestrian and Cycling Access

2.7.5. Stormwater Management Pond

The stormwater management pond situated along the northern edge of the property was created to accommodate the storm water drainage from the adjacent Canadian War Museum, connected via underground piped infrastructure. Owned by the City of Ottawa, the pond was sized to accommodate not only the War Museum's storm drainage but also all of the property immediately south of the pond, including the Memorial Site and the future cultural institution development site.

The stormwater pond design relies upon surface access roads on the east and west ends for maintenance, and a continuous 5-meter wide access route along its southern edge. The west access road, closest to the Monument Site, was built as a compacted underground roadbed covered with topsoil and grass. This road is not visible on the surface. It may be used every few years to inspect the infrastructure and every 8-20 years to remove the sediment from the pond.

The pond is not designed for pedestrian approach or access, and is protected along its northern edge with a chain link fence and significant planted buffer. The southern edge of the pond is currently open, however once significant development is built along its southern flank, the City has stated that some form of permanent barrier will be required in order to protect the public from accessing the pond. The form of barrier is not yet known, but will likely be some form of fence.



Figure 46 Stormwater pond as seen from east looking west



Figure 47 Stormwater pond western end looking north

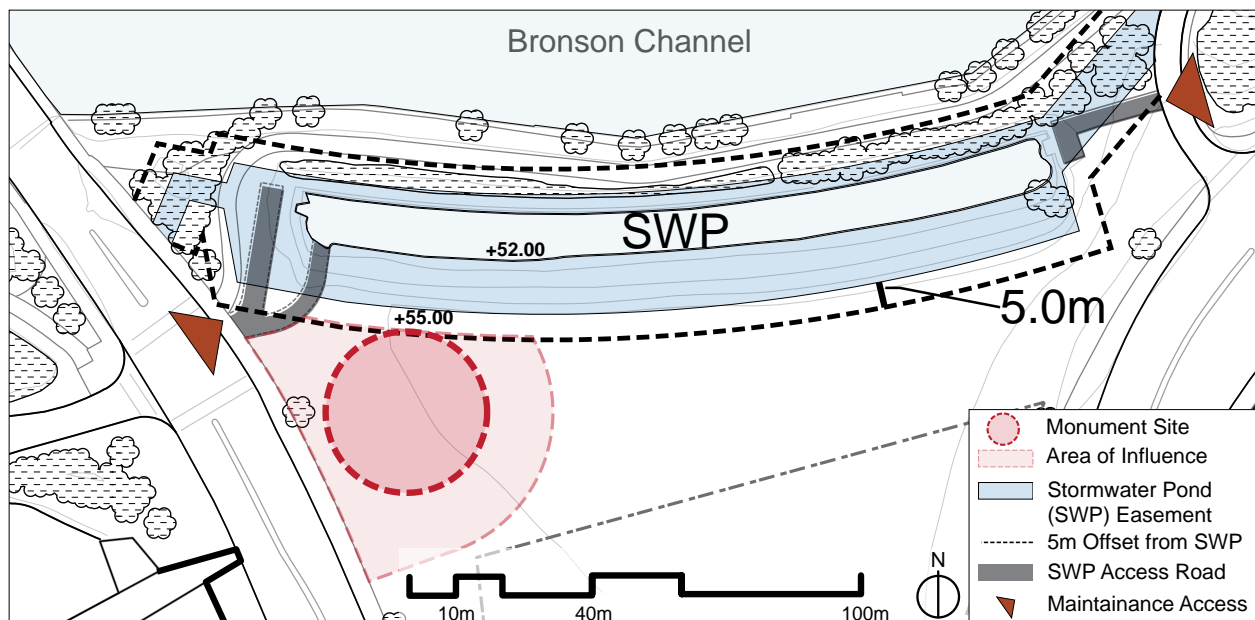


Figure 48 Stormwater Pond + Access Provisions

2.7.6. Surrounding Vegetation and Ecology

The existing Site is predominantly grass covered, with a few street trees along the Booth Street frontage. North of the stormwater pond are more significant plantings including deciduous and coniferous trees and shrubs. The slope of the pond itself is planted with grasses and volunteer shrubs, which is currently mown once a year.

NCC biologist identified potential and confirmed presence of the following species in close proximity to the Site:

- Turtles (potential); Monarch butterfly (confirmed); Bank swallow (confirmed); Barn swallow (confirmed); Killdeer (confirmed)

Geese are also known to frequent and feed on or at the Monument Site and its surrounding property, as it is currently one of the larger open grass areas within this portion of LeBreton Flats.



Figure 49 Site looking east, with southern edge of stormwater pond visible

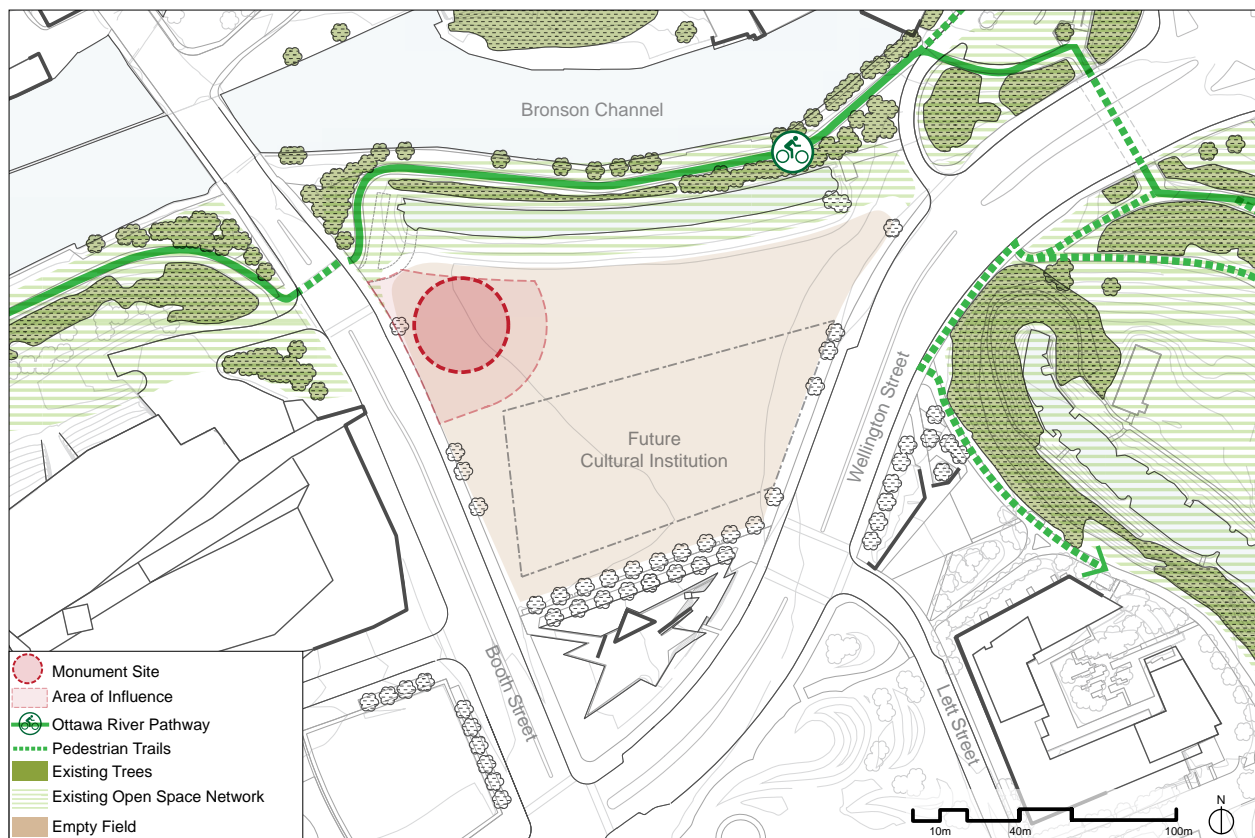


Figure 50 Vegetation

2.7.7. Easements

Beyond the stormwater pond access provisions, noted elsewhere in this document, there are existing Hydro and Bell easements crossing the property and contained within the Monument Site. These easements are governed by agreements between the NCC and the utility companies.

Within these agreements are permissions that allow for the construction of a road or pathway on the easements, and also permit landscaping within the easement. The depth of the utilities located within these easements are approximately 600 to 900 mm below existing grade.



Figure 51 Hydro transformer and other infrastructure located at Booth Street frontage immediately west of the Monument site

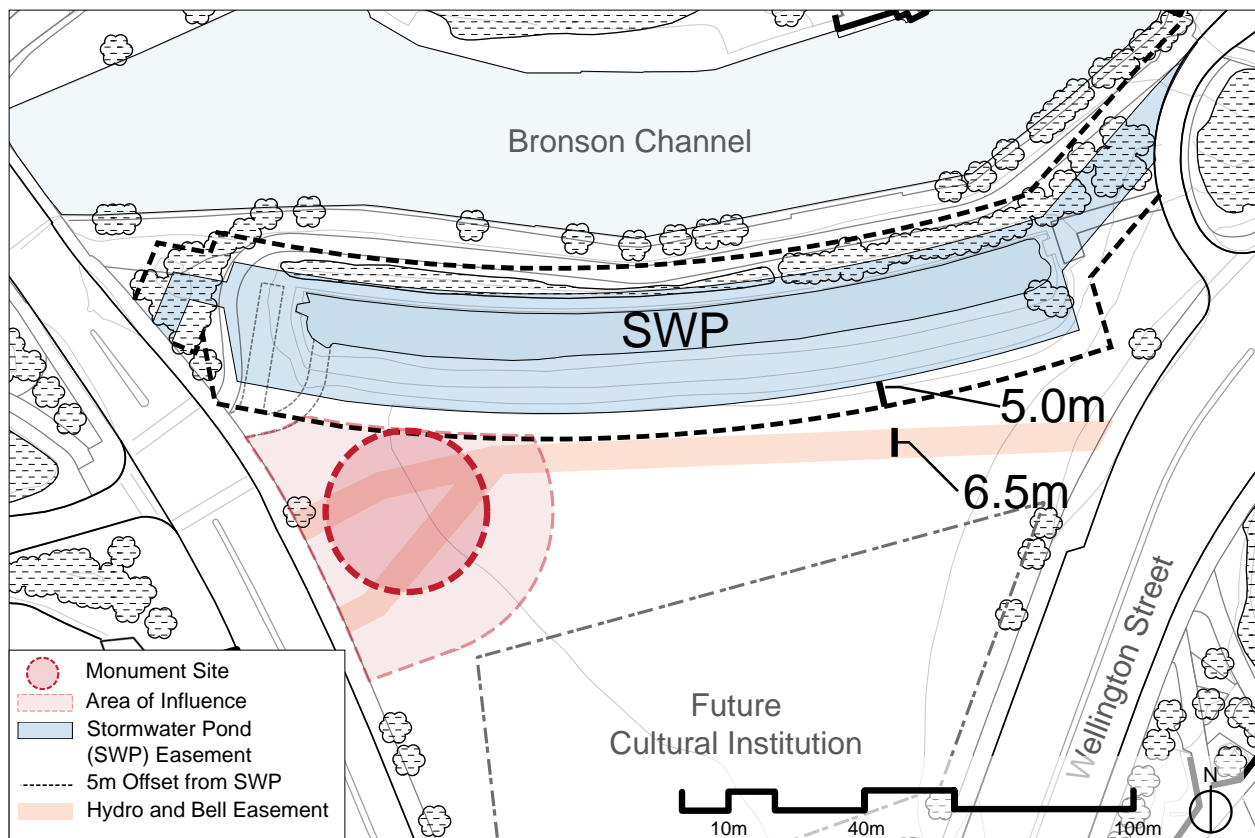


Figure 52 Easements

2.7.8. Site Contamination

The proposed monument Site had former light and heavy industrial use including rail lines, junk yards, and gas stations. It was also subject to the great fire of 1900. As a result, the soil at the Site is contaminated with metals, polycyclic aromatic hydrocarbons (PAHs), and petroleum hydrocarbons. Groundwater at the Site has been shown to meet the applicable federal and provincial criteria.

A Human Health and Ecological Risk Assessment was completed for the Site in 2005. The study determined that the Site was safe for human health and the environment with the installation of a clean soil cap. The cap was installed in 2005.

Project impacts as a result of the contamination include the following:

- Any excess soil created through the construction of the monument will require disposal at an Ontario licensed landfill with costs borne by the Monument construction budget.
- A leachate test of the soil is required by the landfill prior to disposal, with costs borne by the Monument construction budget.
- Soil may be moved within the property but any disturbed soil will require a cap (30 cm clean soil or hard surface) to be installed in order for the Site to be considered acceptable for human health and the environment. Any installed cap must be geotechnically stable, and not subject to erosion.
- Any contractors working on the Site must be informed of the site contamination and they must take proper health and safety precautions for working with contaminated material.

2.7.9. Utilities

Along the Booth Street frontage there are several pieces of public utility visible on the surface, including an electrical transformer, communications box, electrical kiosk, and infrastructure relating to the traffic signal at the pedestrian crossing of Booth Street just south of Chaudière Crossing.

The electrical kiosk feeds the pathway lighting along the Bronson Channel on east and west side of Booth Street, and is proposed to be used to provide any power necessary to illuminate the Monument.

Any additional servicing connections, including water, fibreoptic, natural gas and storm, would be available to the Monument site from Booth Street.



Figure 53 Electrical Kiosk on Booth Street

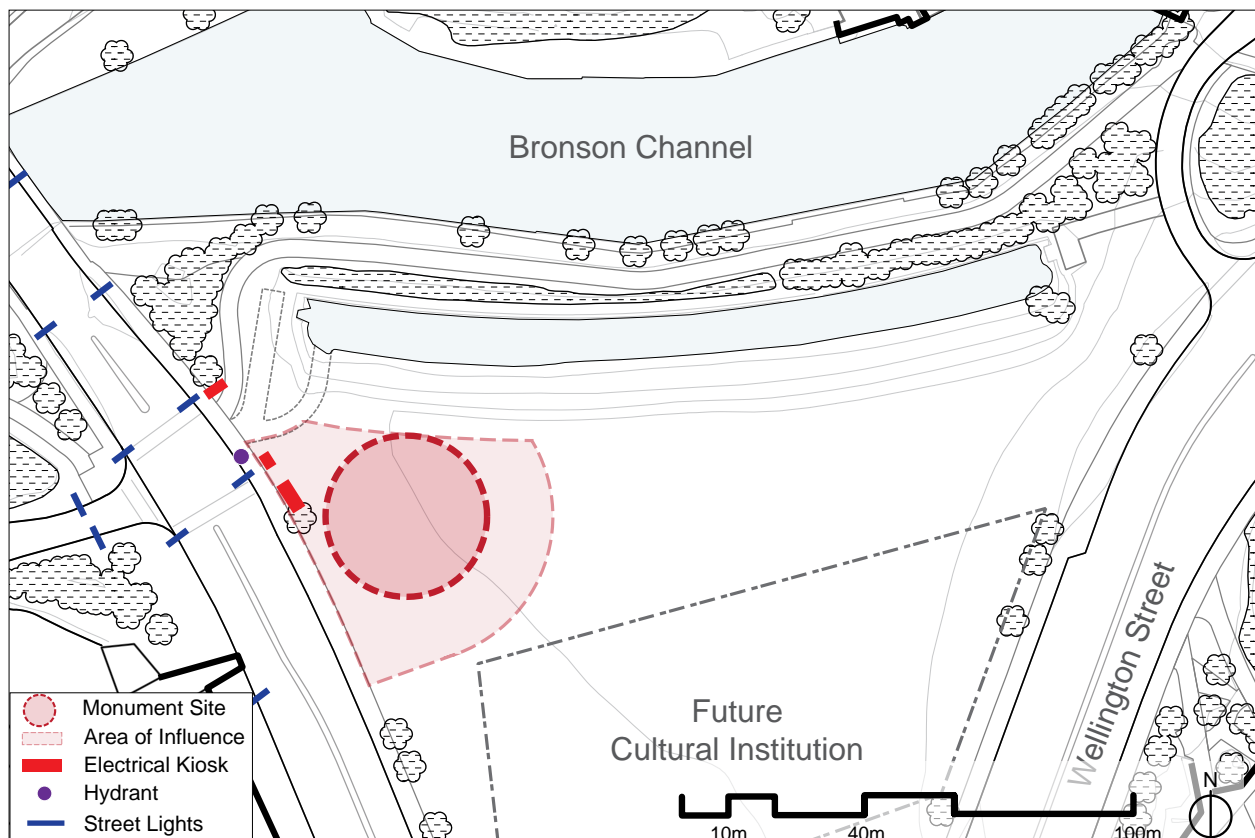


Figure 54 Utilities

2.8. VIEWS PROTECTION CONSIDERATIONS

2.8.1. Statutory Views Protection

Two Height Control Planes regulating areas of LeBreton Flats are part of City of Ottawa Official Plan policies and NCC Views Protection policies:

- The first is intended to protect panoramic views from Sir John A. MacDonald Parkway as it rises over the CPR tracks (represented by Viewpoint 16), that give eastbound motorists a brief but special appreciation of the geography of Ottawa's centre. From this location most of the Parliamentary Precinct, much of the Central Capital Landscape and the downtown skyline is seen across the open landscape of the river and the flats. A similar but more protracted sequence of views is presented to cyclists and pedestrians moving eastward on the Ottawa River Pathway.
- The other Ottawa Official Plan / NCC regulated view protection plane emanates from the Wellington / Booth intersection (Viewpoint LB/B). This is intended to protect the panoramic view that extends from the Great Hall of the National Gallery to the north, extending across the western escarpment and Wellington Street to the West Memorial Building and the Garden of the Provinces to the east. This viewpoint does not affect the Monument Site and is therefore not illustrated in this document.

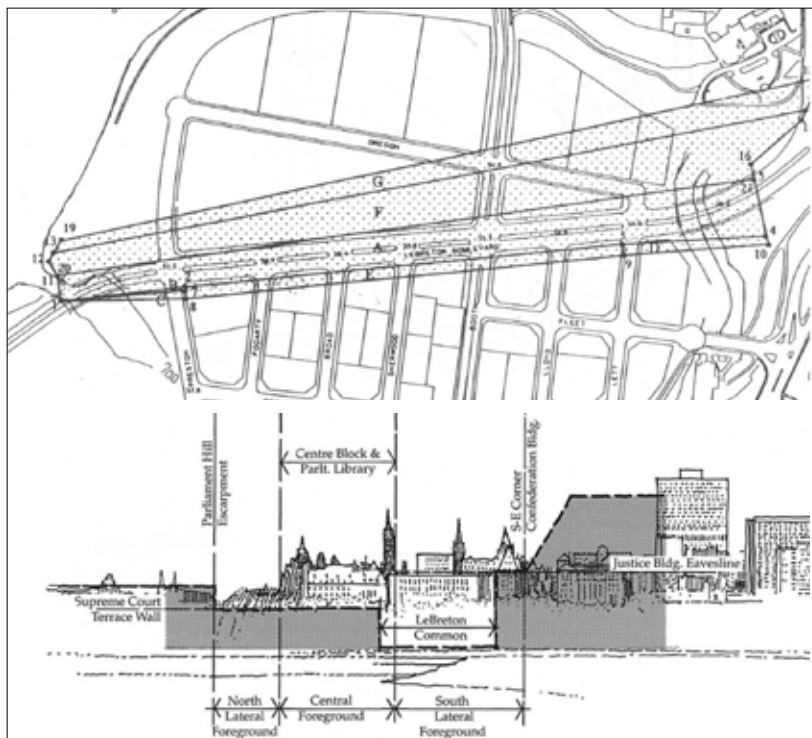


Figure 55 Viewpoint 16 as described in the City of Ottawa Official Plan, 2003



Figure 56 Photograph of Viewpoint 16 (Source: NCC)

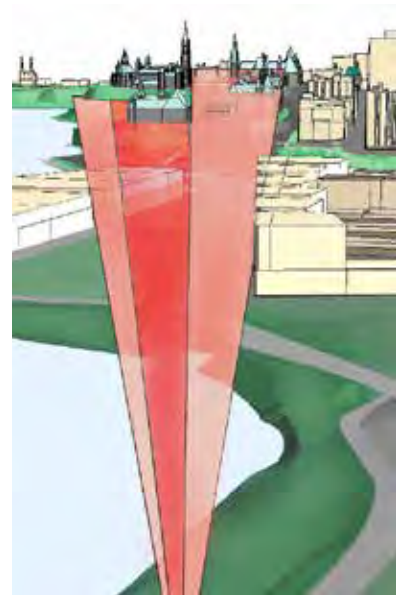


Figure 57 Viewpoint 16 View Control Plane graphic (Source: DTAH)

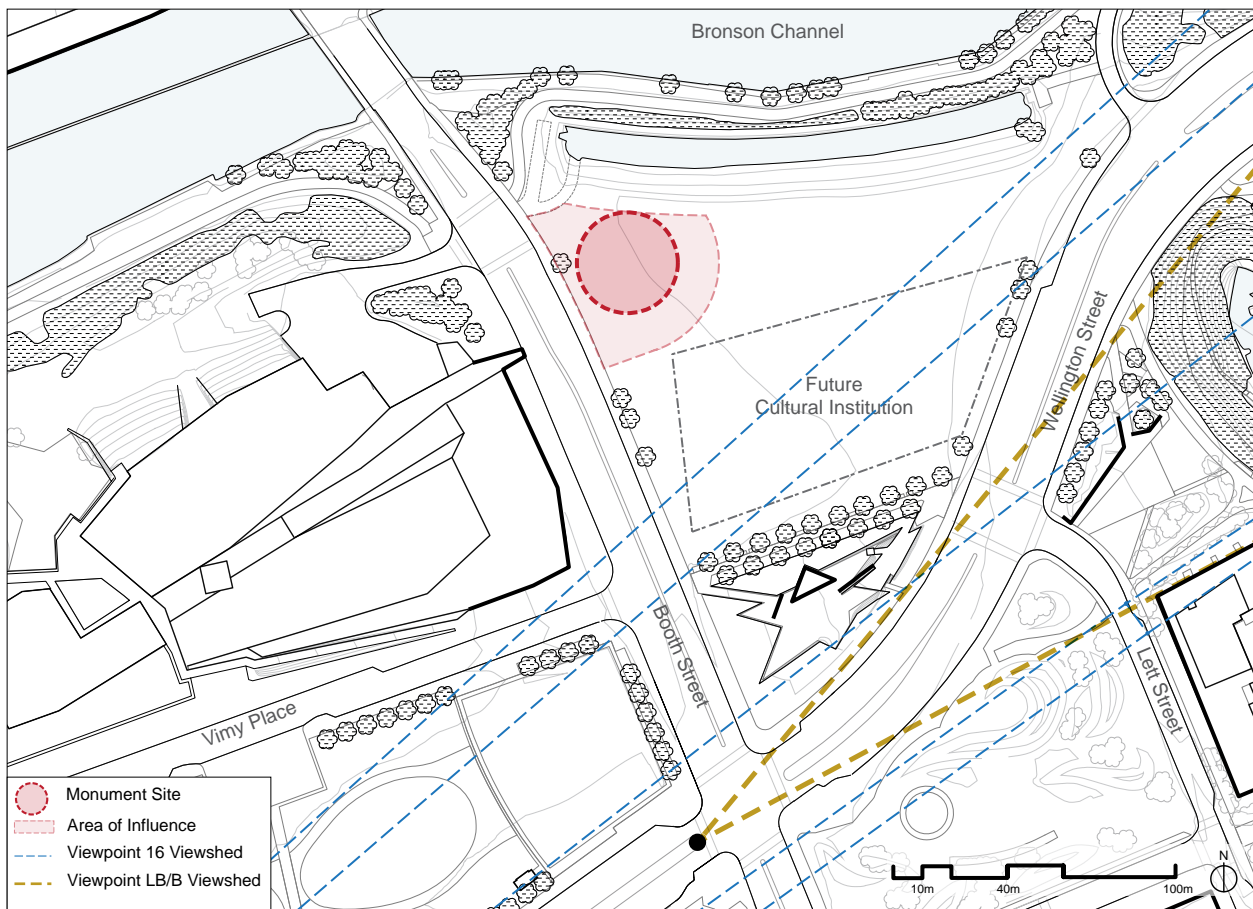


Figure 58 Viewpoint 16 relative to Monument Site

2.8.2. Views from the Canadian War Museum

The design of the Canadian War Museum (CWM) gives special attention to views from within the building interior and from its publicly accessible rooftop towards the symbolic and visual landmarks in the Capital landscape.

- View A: Most significant is the tightly framed view of the Peace Tower from the mezzanine of Regeneration Hall towards Parliament Hill and Peace Tower. The Monument shall not be visible in this view and therefore is subject to height restrictions in the Peace Tower View Axis noted in Figure 58.
- View B + C: Other views from CWM that have particular value and should be fully recognized are: The view from the rooftop walkway, across the planted roof, to the silhouetted skyline of the Parliamentary Precinct, and the view from the lower exhibition hall of the museum looking east.

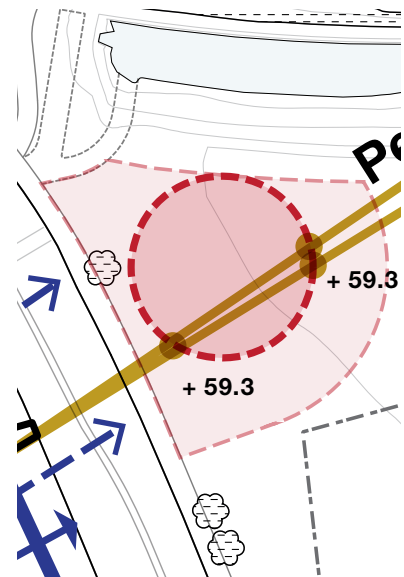


Figure 59 Height Restrictions due to the Regeneration Hall-Peace Tower Axis

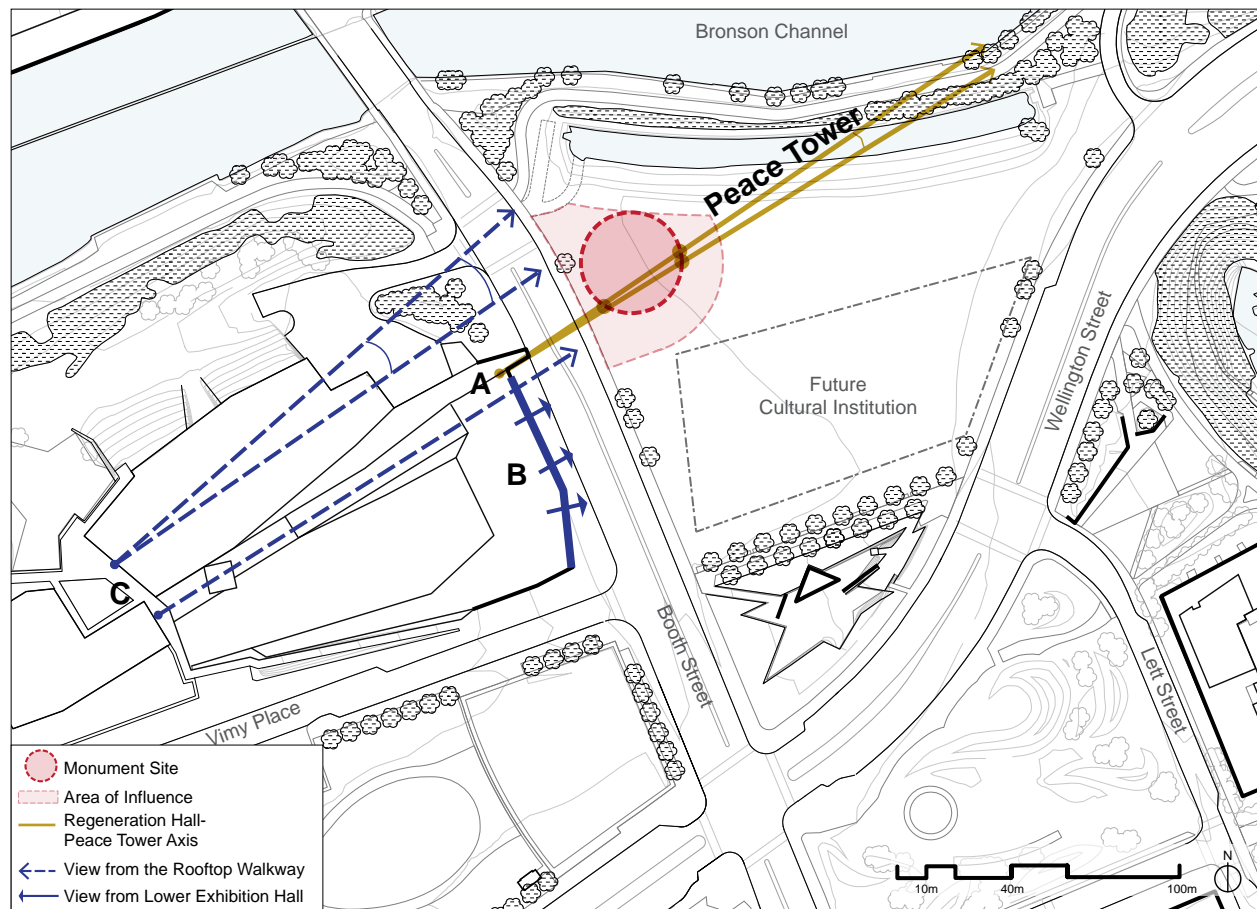


Figure 60 Influence of Canadian War Museum on Monument Site



Figure 61 View A: from Regeneration Hall including frosted glass panes



Figure 62 View B: from lower Exhibition Hall looking west



Figure 63 View C: from the rooftop walkway looking east

3.0 VISION AND PROGRAM

3.1. BACKGROUND

The terrorist attacks of September 11, 2001 initiated a global response. In October 2001, the Government of Canada announced its participation in an international anti-terrorism campaign in Afghanistan. Canada's commitment mobilized a whole-of-government mission, which included Canadian Armed Forces, police forces, public servants and civilians.

From 2001 to 2014, Canada conducted counter-insurgency operations and trained Afghanistan National Security Forces. Canadian efforts also focused on education, healthcare, infrastructure and human rights.

Canada's active role in Afghanistan was part of a long-term commitment to help the Government of Afghanistan build a more stable and secure future for its people.

Many Canadians died as a result of their service in Afghanistan, including Canadian Armed Forces members, a diplomat, foreign aid workers, a government contractor and a journalist. The mission in Afghanistan is Canada's fifth most costly military engagement in terms of lives lost. Thousands of Canadian Armed Forces members were also injured—physically and psychologically—during the mission.

3.2. VISION

The National Monument to Canada's Mission in Afghanistan will recognize an important chapter in Canada's history and pay tribute to the commitment and sacrifice of Canadians in helping to rebuild Afghanistan.

3.3. PROJECT GOAL

Create an enduring monument in the Nation's Capital to those Canadians who served in Canada's whole-of-government mission in Afghanistan, as well as to those Canadians who provided support at home.

3.4. PROJECT OBJECTIVES

- Express Canada's deep gratitude for the sacrifices made by Canadians who served in Afghanistan, including those Canadian Armed Forces members and civilians who lost their lives or were injured—physically and psychologically—in Canada's mission in Afghanistan;
- Recognize the strong support offered by families, friends and communities at home during the mission;
- Acknowledge the efforts of Canadians in standing together with the Afghanistan people to help rebuild their country;
- Serve as a public space for individual reflection and collective remembrance; and
- Encourage understanding of the significance and scope of Canada's mission in Afghanistan.

3.5. GUIDING PRINCIPLES

The following guiding principles must be apparent in the finished Monument and surrounding site. Design teams are responsible for conducting the background research necessary to ensure that their proposal fully captures the project's thematic commemorative intent.

The Monument and associated landscape must:

- embody the spirit of the vision;
- be a respectful, solemn place of reflection and remembrance for families and loved ones of Canadian Armed Forces members and civilians who lost their lives or were injured—physically and psychologically—in Canada's mission in Afghanistan;
- be emotionally compelling and visually striking;
- remain relevant in the future.

3.6. PROGRAM ELEMENTS

Information presented in this section must be integrated in proposals. The objective is to guide, not limit, design teams in their approach to ensure proposals address these key elements and that programming remains consistent and creative.

In line with results of stakeholder consultations, where both having a place of reflection and an educational focus were ranked almost equally important, VAC requests that both elements be incorporated into the monument design including:

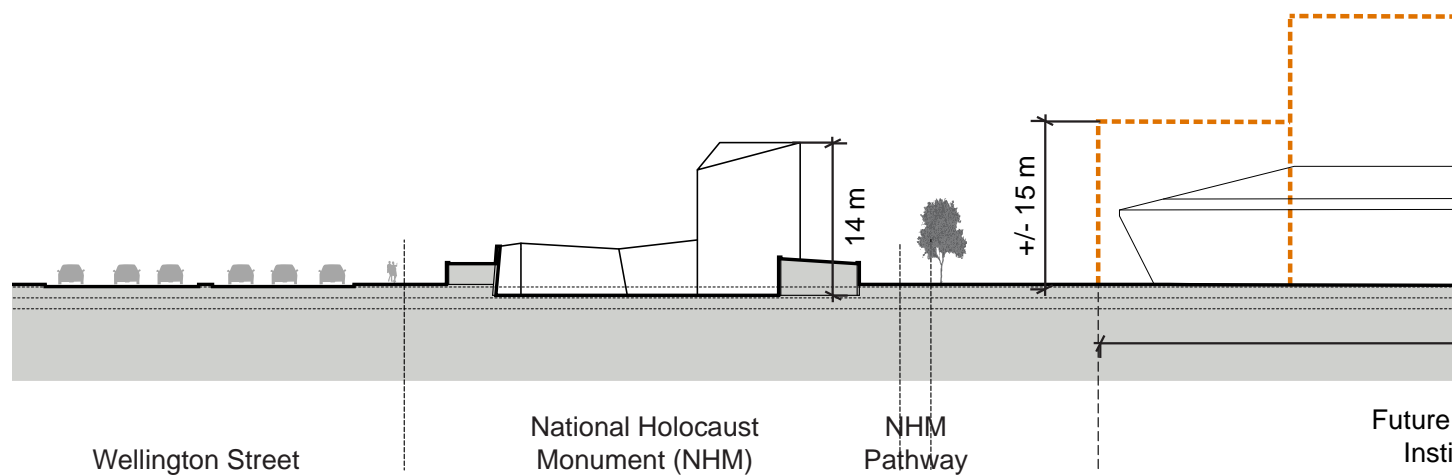
- Dedicated area(s), where seating would be available and attention would be given to reducing ambient noise (as much as possible) to allow for personal reflection and contemplation; and
- Some means of technology allowing users at the Monument Site to connect with Government of Canada educational materials about the Afghanistan Mission. In line with VAC's direction to find innovative ways to engage people in remembrance, the educational component will not be embedded into the actual "bricks and mortar" of the Monument, but rather be made available through technology. This approach should also provide flexibility to adapt to evolving technology; and
- The Monument needs to also have at least one interpretive plaque/signage that will include information about the Monument itself and high level information on the mission. Interpretive plaques must include both English and French text. Any text pertaining to a Land Acknowledgment would include a third language.

4.0 DESIGN GUIDELINES

4.1. GENERAL CHARACTER OF THE MONUMENT

The Monument should promote introspection and contemplation.

The proponent, Veterans Affairs Canada, has requested, in line with the results of their consultations, that both a place of reflection and an educational focus be incorporated into the Monument's design.



4.2. MONUMENT PLACEMENT AND EXTENT

The Monument should occupy a primary placement within the Monument Site and may include supporting elements within the Area of Influence.

This location provides good access, develops a suitable visual relationship with the Canadian War Museum, allows space for other daily activities and functions, and offers views to and from the Site to adjacent institutions and commemorations.

The results of the stakeholder consultations suggest equal importance to creating both “an ensemble of components that encourages movement through the site” and “an impressive monument in an open space”, therefore both options should be given consideration by design teams when developing their concept for the placement and extent of the Monument.

The principle components of the Monument should be located within the 1,000 square metre Monument Site. For the purposes of demonstration, the centre of the 1,000 square metre Site is marked by a red cylinder extruded to the height of seven metres, the maximum height suggested for the Monument. Development beyond the Monument Site within the Area of Influence should be limited to associated design features such as vegetation and pathways.

Alternatives that include significant elements within the Area of Influence can be proposed but will need to be supported by a convincing rationale.

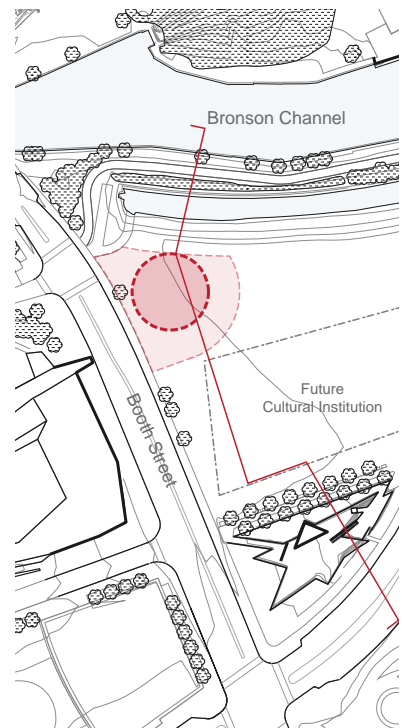
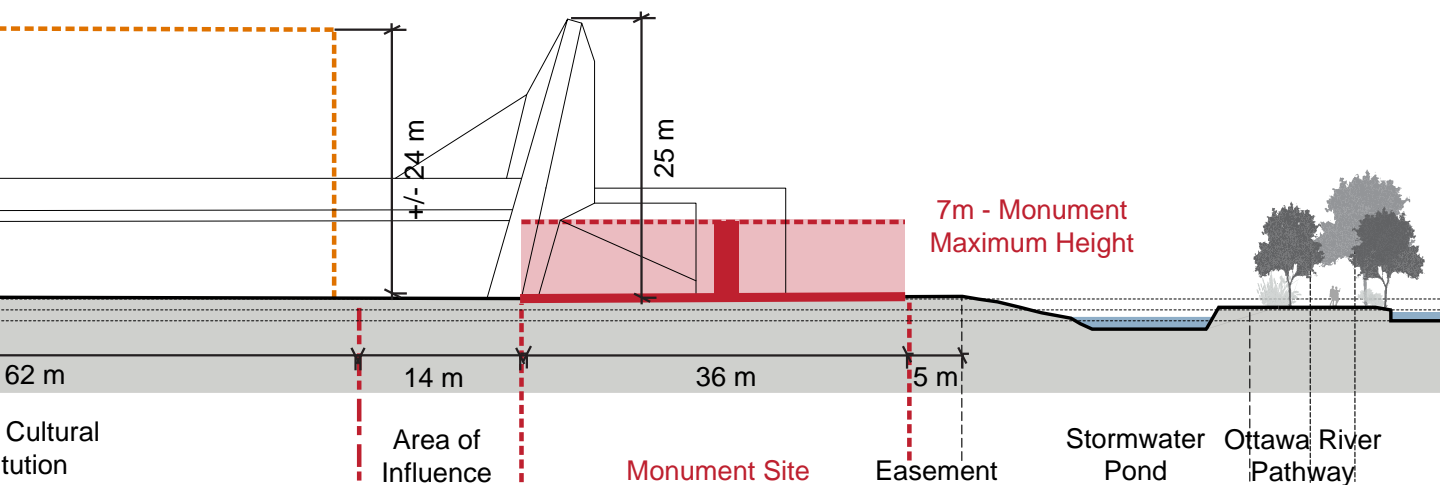


Figure 64 Above: Key Plan showing location of section drawing and centre of Monument Site

Figure 65 Below: North-south cross-section of Monument site looking west



4.3. ACCESS AND CIRCULATION

Provide clear and accessible circulation through the site and to the commemoration.

Primary access to the Monument is assumed to be from Booth Street, in both directions, including from the adjacent transit stop. Additional pedestrians will approach from the north by way of the Ottawa River Pathway and its intersection with Booth Street. These access points are assumed to be winter-maintained.

Secondary access will be provided from Wellington Street via a future landscape pathway. In the short-term pedestrian access would be available informally through the existing grass.

Pedestrian access to the Monument should be provided from these points of arrival.

In the longer-term additional path connections to the Monument site may be developed in concert with the future cultural institution, including additional diagonal connections from Booth Street, as well as additional connections by way of the Ottawa River Pathway. The precise footprint and shape of these pathways are not yet known.

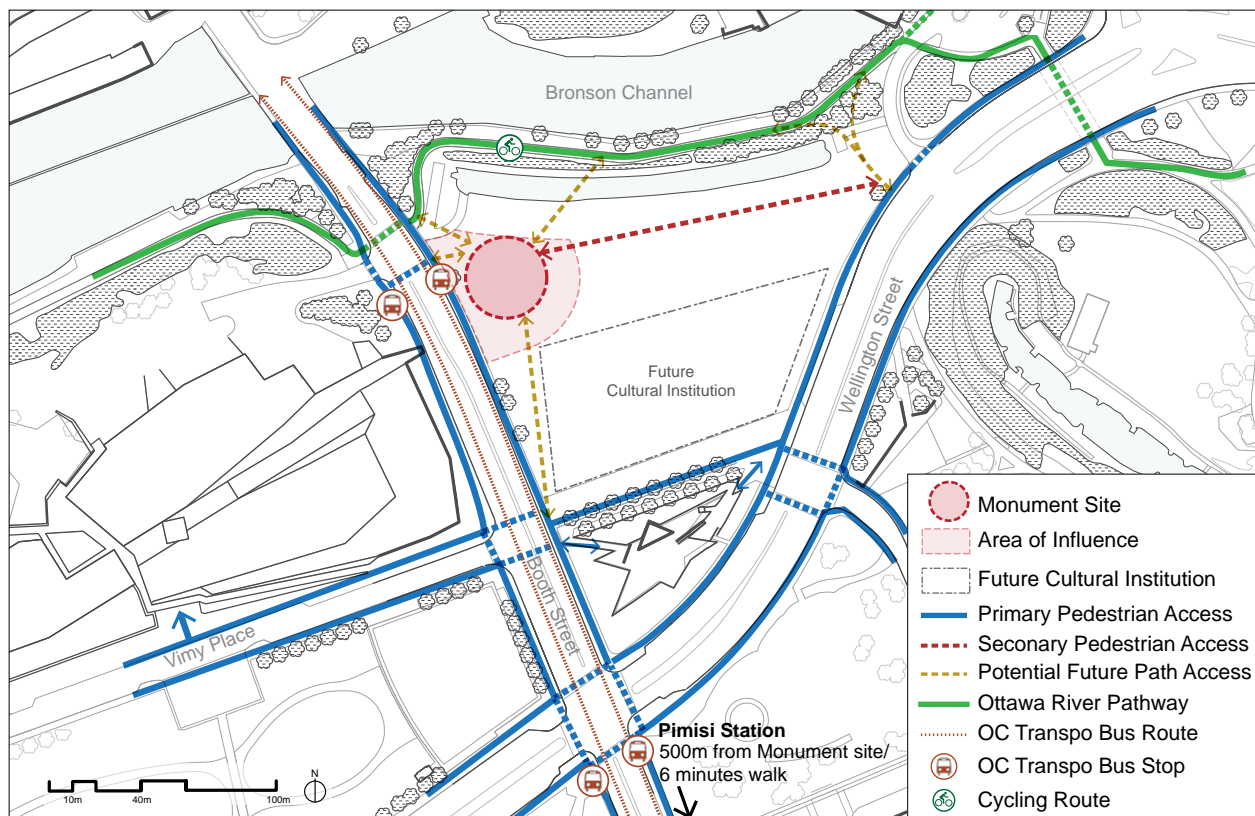


Figure 66 Access and circulation

4.4. ORIENTATION AND KEY VIEWS

Orient the Monument to address the various approach conditions identified for the Site, including consideration of the speed with which visitors and passersby will be witnessing the Monument (on foot, on bike, and from within a vehicle).

The Monument Site is located at the confluence of numerous routes and desire lines. Principal views to the Monument from the intersection of Wellington and Booth Streets are to be assumed to be maintained in both short and long-terms by built-form setbacks suggested within the conceptual master plan for the future cultural institution. Important longer views also exist from Wellington Street, where the Monument will be set in front of the powerful east elevation of the Canadian War Museum. More local views from the southeast corner of Booth Street and Vimy Place are likely due to the volume of visitors to the Canadian War Museum and National Holocaust Monument.

Competitors are also encouraged to consider views from the Ottawa River Pathway, with potential selective pruning of existing vegetation permitting particular views of the Monument to be achievable. Views from the Monument toward Parliament Hill are also to be considered.

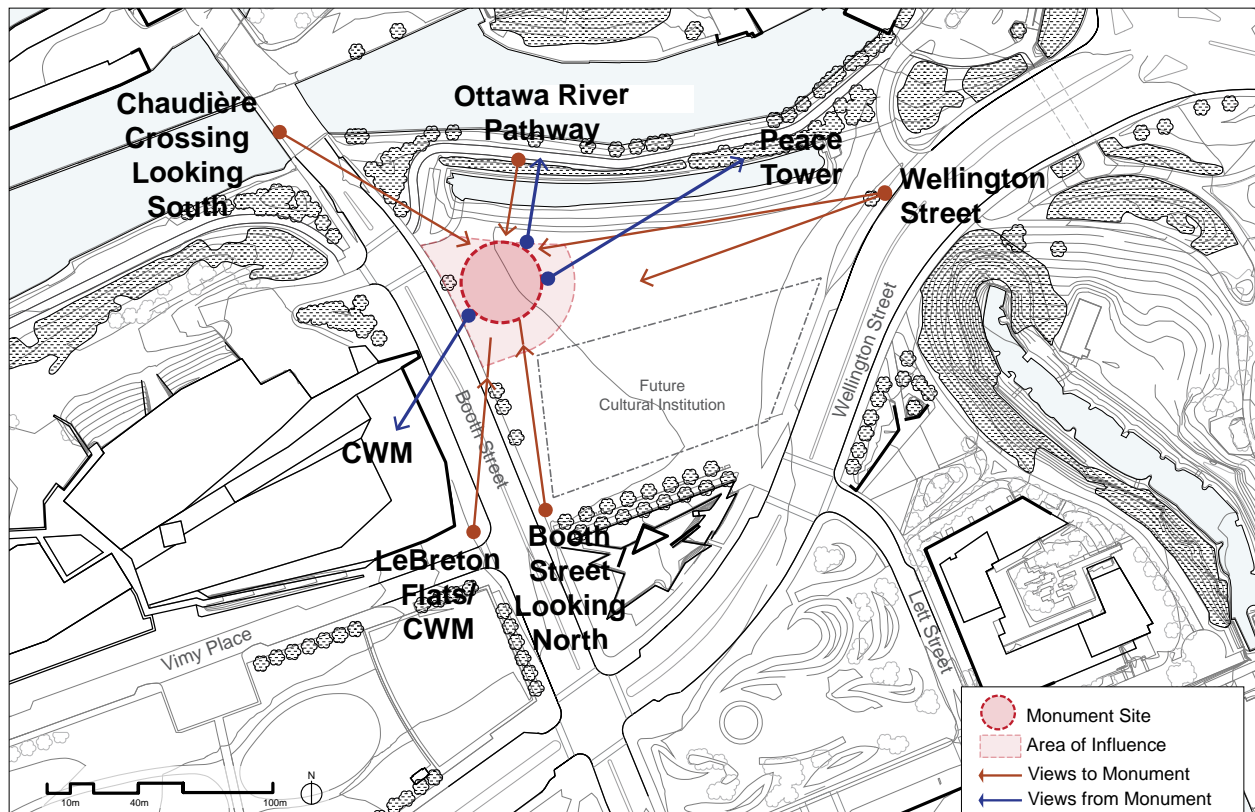


Figure 67 Key views to and from the Monument

The images below were generated from a 3D model of the Monument site and context, and include the proposed maximum building envelope of the future cultural institution (in transparent orange) to illustrate how this future building might additionally frame views to the Monument site. For the purposes of this demonstration, the centre of the 1,000 square metre site is marked by a red cylinder, and the entirety of the Monument Site is extruded to the height of seven metres, the maximum height suggested for the Monument. This representation tool allows competitors to visualize the visibility, scale and impact potential of the Monument as seen from the various view points described below and right.

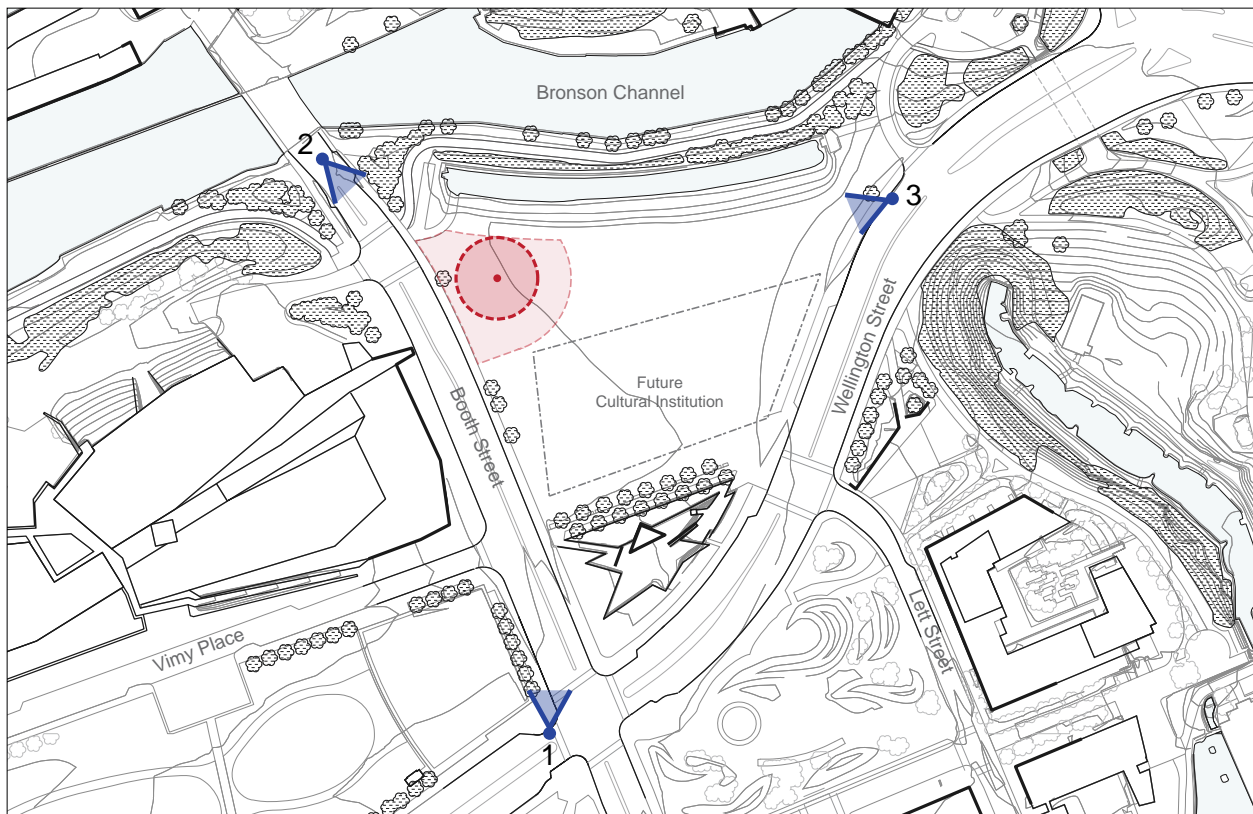


Figure 68 Key plan of perspective views



Figure 69 Perspective view 1: from Booth/Wellington Intersection looking north



Figure 70 Perspective view 2: from Chaudière Crossing looking south

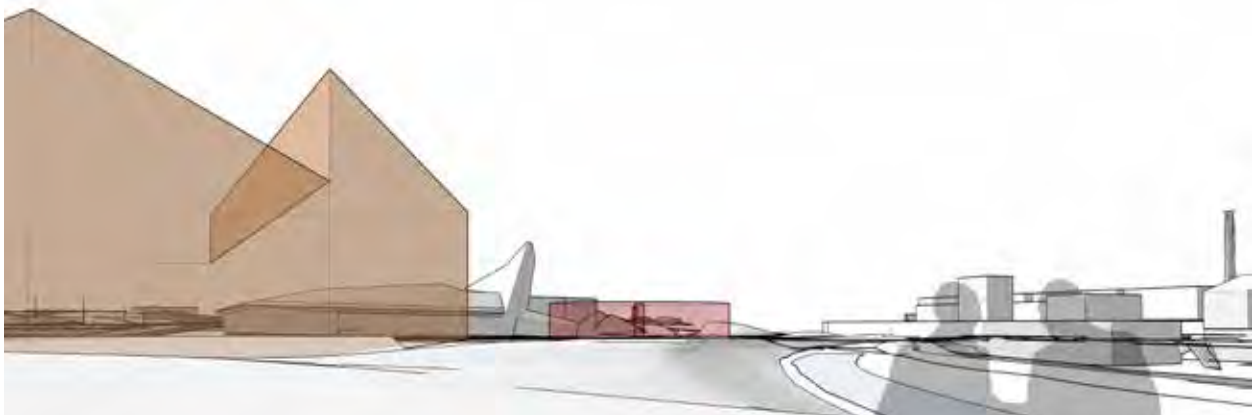


Figure 71 Perspective view 3: from Wellington looking west

4.5. SCALE AND HEIGHT

The scale and height of the Monument should complement the surrounding river landscape and the adjacent Canadian War Museum, and consider the impact of the future cultural institution on the Monument's visual presence on the Site.

Key components of the Monument should be visible from the intersections of Booth and Wellington Streets, Booth Street and Vimy Place, as well as from Wellington Street at the eastern end of the stormwater pond. The profile of the Monument should be considered in the context of the Canadian War Museum to the west, the eastern elevation of which is often illuminated at night. The river landscape to the north of the Monument Site also serves as a green backdrop to the Monument when viewed from the south.

The Site and its larger present-day context is also expansive, flat and large in scale. While it is expected that additional vegetation may mitigate the open expanse of the Site in the longer term, the Monument should be designed to “sit comfortably” in the existing landscape context, as well as within the context as it evolves with the construction of the future cultural institution.

No part of the Monument should be higher than the lower roof datum of the Canadian War Museum, dimensioned to be seven metres. In addition, a further height restriction along the Peace Tower view axis from the Canadian War Museum is applicable, as noted in Section 2.8.2.

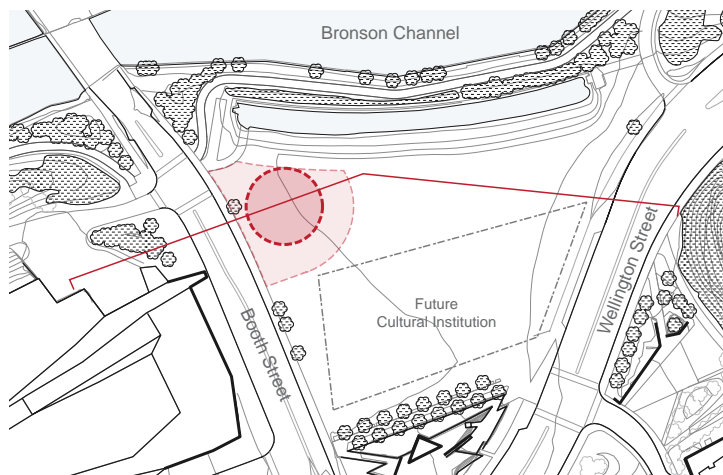
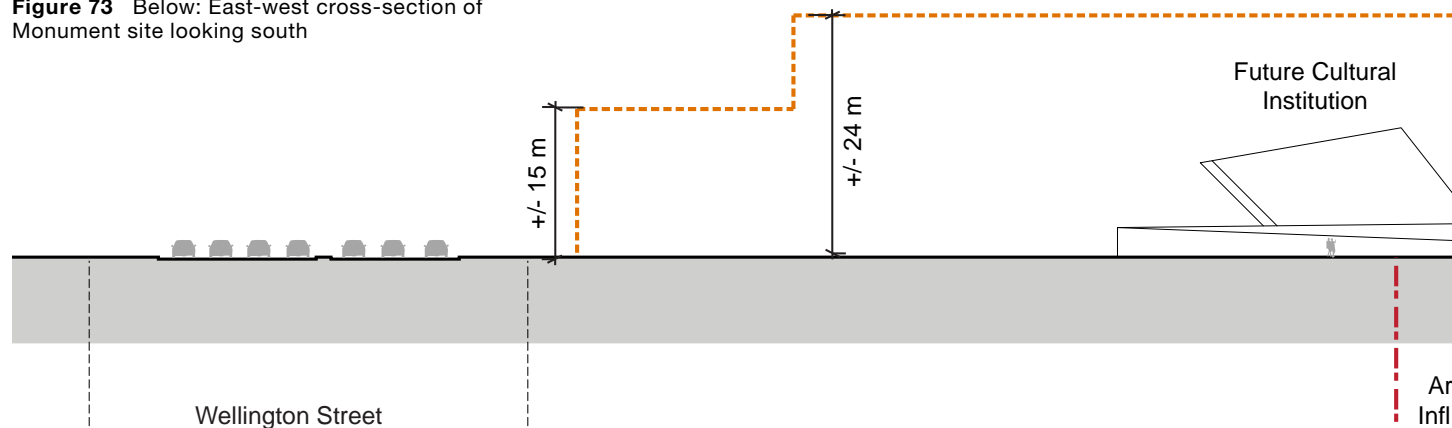


Figure 72 Above: Key plan showing location of cross-section

Figure 73 Below: East-west cross-section of Monument site looking south



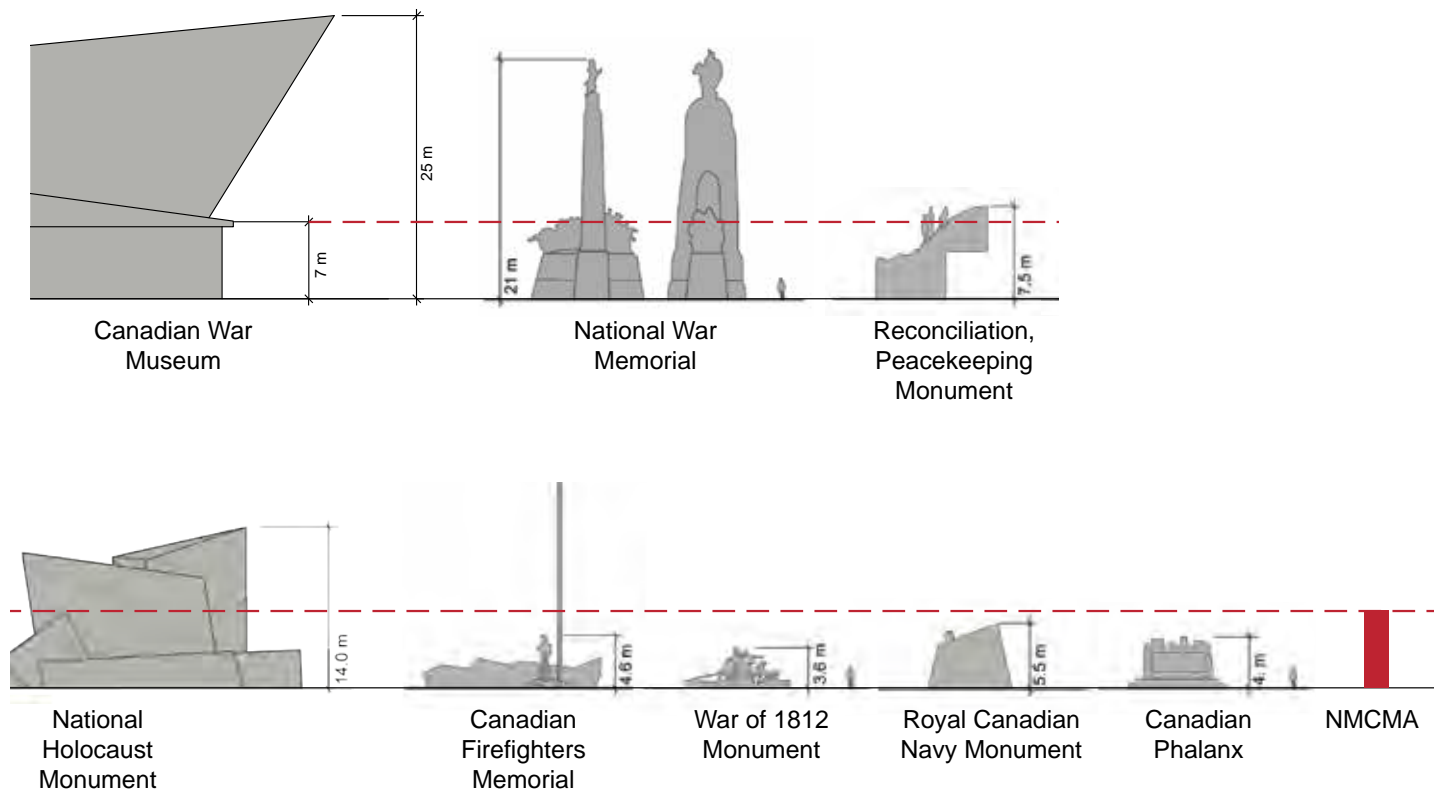
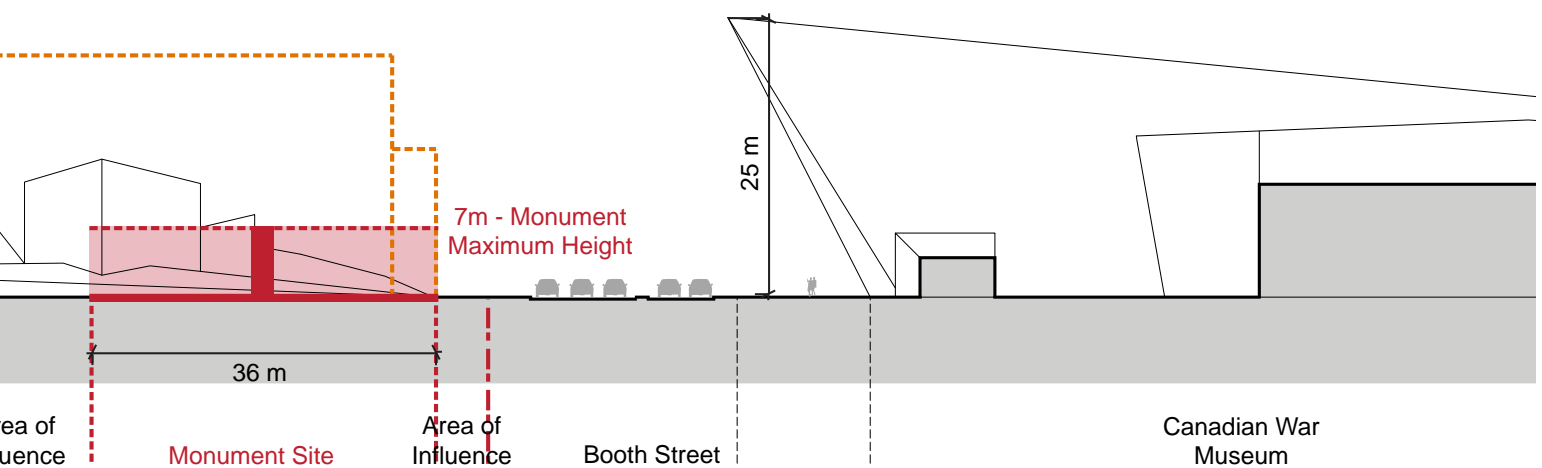


Figure 74 Relative Scales of Commemorations in the National Capital



4.6. MATERIALS AND COMPONENTS

Materials and components should be noble, contemporary and durable.

Materials should originate from Canada, should be evocative of sacrifice and seek to establish a meaningful link to the Mission.

All components and materials should be durable and long-lasting, as good commemorations project a sense of “forever”. Materials should also require only basic maintenance such as leaf removal, sweeping, and periodic hosing down. Components dependent upon specialized operational or maintenance requirements should also be avoided.

On occasion, the Monument may fall victim to deliberate physical damage and graffiti. The design should permit evidence of these activities to be removed quickly and scar-free. Anti-graffiti coatings should be considered where appropriate. See Section 5.6 for further requirements.



Figure 75 Veterans Memorial, Toronto (Source: DTAH)



Figure 76 Reconciliation: The Peace Keeping Monument, Ottawa (Source: NCC)

4.7. VEGETATION

Protect existing vegetation and add supporting vegetation.

In general, existing trees should not be impacted by the design and construction of the commemoration. If tree removals are proposed, their replacement at a 2:1 ratio should be included in the design and budget. Invasive shrubs and under-storey plants blocking views to the river in the vicinity of the Monument can be selectively removed and replaced with low-growing native species, but must be within the project budget.

Additional vegetation (trees, shrubs, ornamental grasses) should be considered in order to create spaces and an ambiance that support the primary intention of the commemoration.

Vegetation can also be used to mitigate negative micro-climate conditions – sun, shade, wind, noise – and provide seasonal variation.

Integrate measures that are feasible within the budget to deter geese from accessing the commemoration. These measures should be subtle, natural-looking and well-integrated into the landscape.

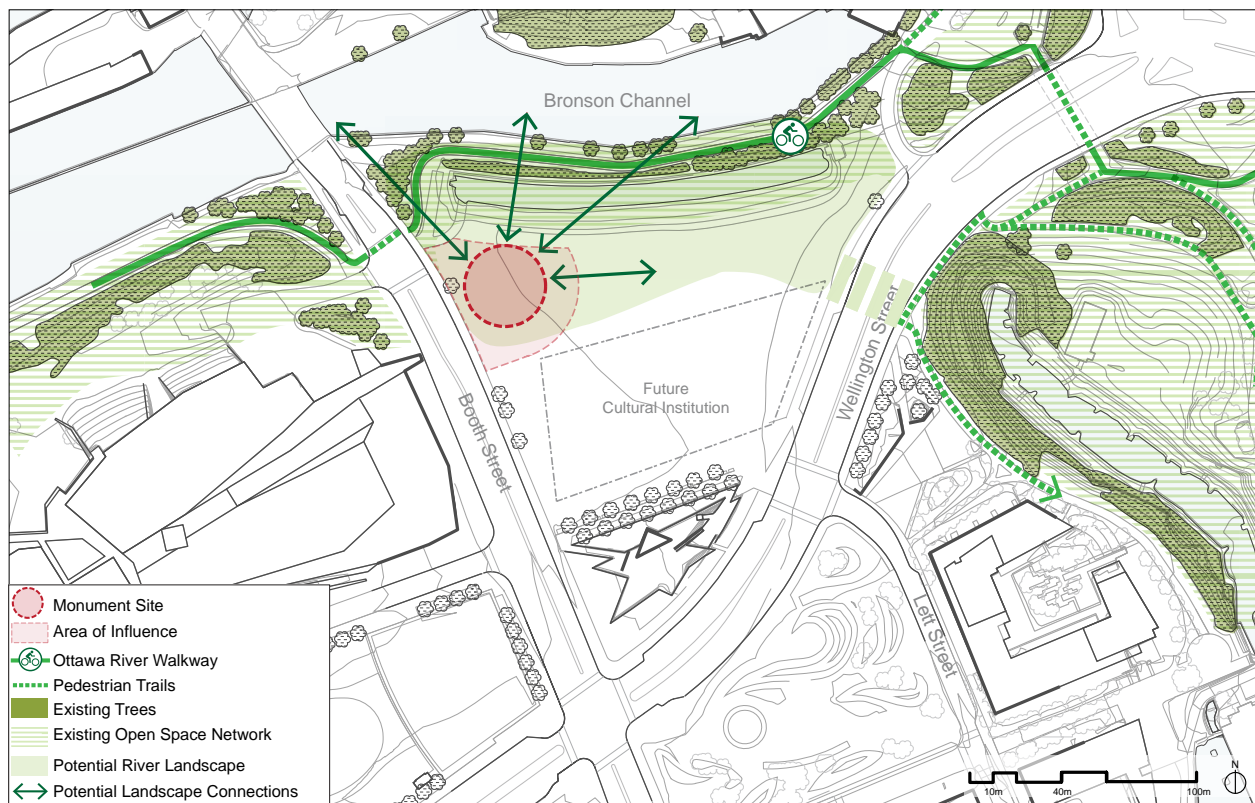


Figure 77 Site landscaping along the north edge of stormwater pond

4.8. GATHERINGS AND CEREMONIES

Accommodate commemorative gatherings and ceremonies.

The Monument will be designed to facilitate occasional ceremonies. These ceremonies may be formal affairs with speeches and music or informal gatherings involving only a few individuals.

The design of the Monument and its setting should provide sufficient open space to accommodate groups of up to 250 persons (50-100 seated), as well as a dedicated place for wealth laying. The Monument should be oriented appropriately to a focal point where a podium or temporary stage could be installed to facilitate proceedings, the location of which should consider micro-climate conditions outlined in section 4.11. The Monument should be positioned in such a way as to capitalize on the open spaces adjacent to the Site to accommodate larger gatherings. The Monument should not look “empty” when gatherings are not taking place.



Figure 78 Ceremony at the Canadian Firefighters Monument (Source: NCC)

4.9. OTHER ACTIVITIES

Accommodate normal day-to-day activities on the Site.

In the immediate vicinity of the Monument Site are significant cultural institutions and housing developments that represent hundreds of staff, visitors and residents potentially working and living nearby.

The Monument and its surroundings should therefore be designed to support the normal activities that are to be expected in an open landscape adjacent to major cultural attractions and residential redevelopments.

At the same time, the core or focus of the Monument should continue to convey a quiet and contemplative atmosphere while these activities are occurring in the surroundings.



Figure 79 Potential for casual gatherings and other uses (Source: NCC)

4.10. SITE GRADING

Integrate the new design into the existing Site topography.

While some manipulation of the existing Site grading may be required in order to establish an appropriate commemorative setting, and to provide universal access and places to gather, it should respect and be well integrated into the existing topography.

Site grading should be contemplated with due respect for existing underground utilities and existing soil conditions. As outlined in Section 2.7.7. and 2.7.8., the existing servicing easements passing through the Site restrict excavation and foundation design within the footprint of those easements. Earthworks above these easements are restricted to those permitted within the easement agreements. Furthermore, as indicated in Section 4.13, considerations of soils contamination will also likely influence the grading of the site.

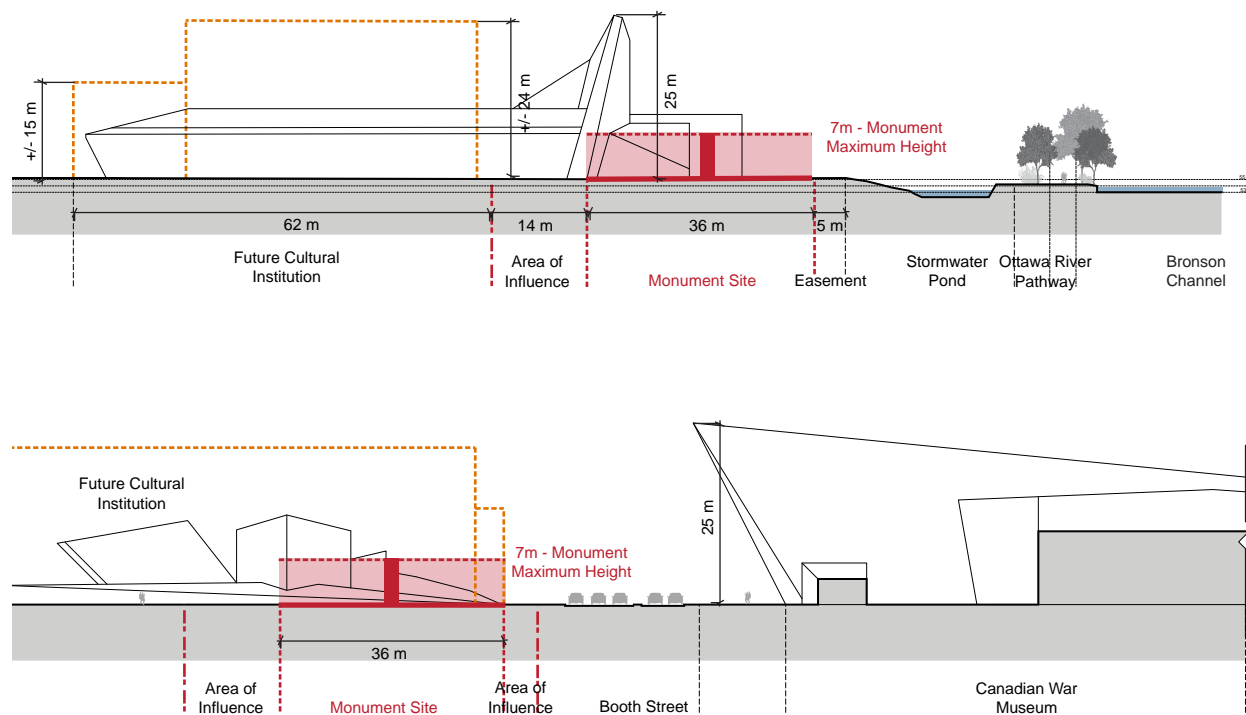


Figure 80 Site section North-South (top) and East-West (bottom)

4.11. SOLAR ORIENTATION AND MICRO-CLIMATE

The Monument should be designed to optimize sunlight and create a comfortable micro-climate throughout the year.

The sun is a brilliant and natural source of light that can illuminate outdoor installations and clearly reveal even minute details. At the initial stage of development, the Monument site will be fully exposed to sun through daylight hours in almost all seasons, but this condition could be changed significantly by the construction of the cultural institution on its south flank. While the built-form and construction timing of the cultural institution is not known, attention should be paid to developing forms, details and surface textures that take advantage of the Site's solar orientation. Solar orientation should be considered when planning for gatherings and ceremonies. Opportunities should be created for both shade and exposure to sun for human comfort as well as winter wind protection and summer ventilation.

Another significant micro-climate consideration is the noise impacts on the Monument Site from Booth Street, a busy street during most times of day due to its linkage function to Gatineau. Efforts should be made to dampen the traffic noise from Booth Street, in order to create areas within the Site with a contemplative character that may also permit an experiential relationship to the calm of the river landscape to the north.

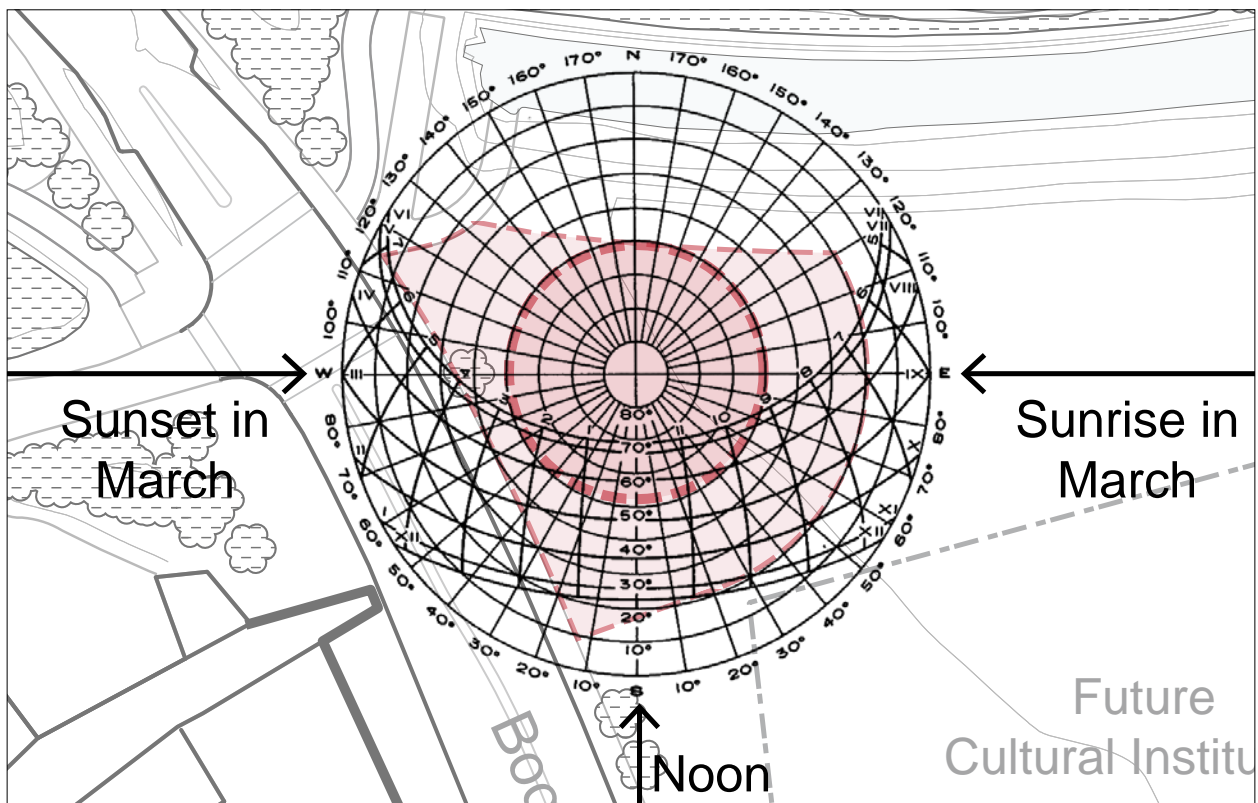


Figure 81 Diagram illustrating site solar orientation

The predominant winter wind impacting the Site originates from the northwest. Consideration should be made in the design to elements that may serve to dampen wind impacts, particularly winter winds, and may include either built screens or vegetated solutions.

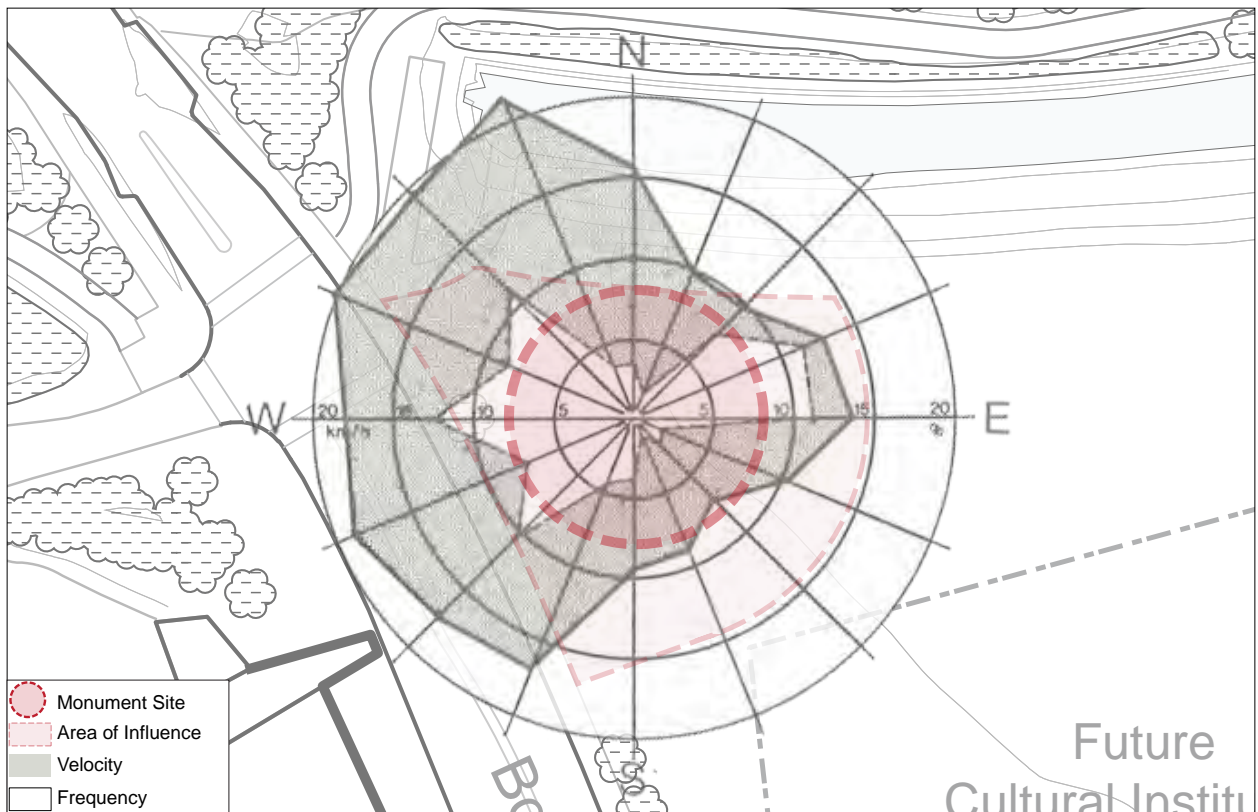


Figure 82 Diagram illustrating site winter wind rose

4.12. STORMWATER MANAGEMENT

Stormwater management for the Monument must be dealt with in a sustainable manner without relying upon access or manipulation of the existing stormwater management pond.

The existing stormwater management pond has sufficient capacity to accept overland flow drainage from the Monument Site, if necessary. Due to access requirements and safety concerns, the Monument design can not physically engage with the pond. The realities of the physical proximity of the pond and visual overlook should be considered as part of the Monument design.

In future it is likely that the owner of the pond, the City of Ottawa, will require some form of barrier fence to be installed along the southern edge of the pond. The design of this barrier will be determined in future with NCC input, and can be assumed to be compatible with the landscaped character of the river landscape.



Figure 83 Precedent for future barrier fence to pond, St. James Park, London



Figure 84 Existing stormwater management pond at the northern edge of the property (Source: NCC)

4.13. GEOTECHNICAL AND SOIL CONDITIONS

The design of the Monument should recognize the existing geotechnical and soil conditions.

Geotechnical information on the Monument Site is not comprehensively available, but bedrock is generally understood to be between 1-3 metres below-grade. Environmental studies have shown that this area of LeBreton Riverside East includes fill material identified as a mixture of silty clay, coarse sand and gravel with construction waste material (brick, wood, wire and concrete), ash and coal. Further geotechnical investigation may be required in order to confirm footing designs and other considerations.

As noted in Section 2.7.8., soil contamination is present across the Monument Site and Area of Influence, and must be considered in the design. As a result of the contamination, the following will apply to the Monument and should be considered during the design process:

- A minimum of 0.3 m of clean cover material or a hard surface (concrete, pavers, etc.) will be required over any areas of exposed soil.
- Any excess fill will require disposal at an MECP licensed landfill. There will be a tipping fee for soil disposal, so minimizing excess soil volumes may warrant consideration.
- Soil management and health and safety plans considering the contamination and the risk mitigation measures will be required for the Monument.

4.14. SITE UTILITIES

Protect existing underground utilities and provide the infrastructure necessary to support the Monument.

All service connections required for the Monument will be made available from Booth Street.

Electrical service should be provided at the Monument to provide power for lighting and audio requirements such as public address systems or recorded music. It is assumed the electrical connection will come from the existing electrical infrastructure on Booth Street. The nature of the available electrical connections do not support DMX or dimming controls.



Figure 85 Lighting at the National Holocaust Monument (Source: Studio Libeskind)

4.15. PHYSICAL COMFORT AND SITE FURNISHINGS

Provide visitors a commemorative environment that feels welcoming, is safe, and includes comfortable areas for seating while deterring undesirable or unsafe occupation.

The Monument should appear and be perceived as a safe space, with clear sight-lines through the Monument as well as other considerations of Crime Prevention Through Environmental Design (CPTED) incorporated in the design. Areas where unintended loitering or sleeping may occur should be avoided.

Elements of the Monument itself should appear securely fixed in place and not subject to vibration or unintended movement.

Beyond the control of micro-climate impacts noted within Section 4.11, consideration should be given for mitigating heat-island effect through the choice of horizontal surface materials and placement of shade plantings.

Comfortable, accessible and multi-functional fixed seating for up to 10 people should be provided. This seating should be located within close proximity for those studying the Monument or participating in gatherings and ceremonies. For the comfort of visitors who use this seating, consider the elimination of the unintended vibration of elements or sound phenomena due to wind or heavy traffic.



Figure 86 Seating at the Canadian Holocaust Monument (Source: NCC)

5.0 GENERAL GUIDELINES

5.1. UNIVERSAL ACCESSIBILITY

Publicly accessible parts of the Monument must be designed to be universally accessible.

The Monument and all access routes should be designed in compliance with all applicable standards and requirements for universal access.

Universal accessibility is mandatory for all public places. Non-slip surfaces, properly designed ramps and stairs, good lighting and proper handrails are now standard features of all public spaces. Universal accessibility not only makes it possible for people in wheelchairs to move around freely, but it also makes it easier and more comfortable for everyone including those with strollers, bicycles, walkers or canes.

Public safety and universal accessibility should be considered early on in the planning and design process in order to ensure that everyone who might wish to visit the Monument is accommodated. Consideration should be given not only to mobility impairment but also vision and hearing impairments. This objective should be given a high priority and not be overtaken by artistic and commemorative preoccupations.



Figure 87 Universal accessibility to honour all visitors to the Monument (Source: spintheglobe.net)

5.2. LIGHTING AND EVENING EXPERIENCE

Provide lighting to support the Monument and ensure the safety and comfort of visitors.

The Monument Site is part of the Capital Illumination Plan Study Area (see below). The vision of the Capital Illumination Plan is expressed as follows: The nighttime Capital offers memorable experiences, showcases its distinctive character and contributes to a sustainable future.

It is the intention to make the Monument available and usable all day every day. Artificial lighting provides a safe and comfortable setting for evening viewing, and also facilitates evening events and ceremonies. Lighting is particularly important in Ottawa where sunset comes early during the winter. Given the Monument Site's current character within an undeveloped landscape, lighting is particularly important to identify the Monument. When viewed from the east, the Canadian War Museum presents a further interesting backdrop opportunity to the Monument Site through its dramatic nighttime lighting regimen.

Decorative lighting can provide a unique perspective of the Monument because of the ability to re-focus the viewer's attention at different times of day. Elements that are dominant during the day can be subdued and others given new emphasis. Moreover, the lighting sources or light rays can themselves become integral parts of the night-time experience. Lighting should, however, be energy efficient and easy to maintain. In-ground lighting is not permitted. With all forms of lighting, dark sky protection is required. Photometric analysis of the lighting design will be required to ensure compliance with dark sky protection requirements.



Figure 88 Map of the Capital Illumination Plan Study Area (Source: NCC)

5.3. SEASONAL EXPERIENCE

The Monument design should provide for a year-round commemorative experience.

The design should be expressive, respectful and legible at all times of the year.

In a city that experiences hot, humid summers and long harsh winters, the Monument should be designed with all seasons in mind. Winter should, in fact, be accepted as an asset because of the beautiful interaction between snow and landscape.

The Monument should also be accessible all year. Only the Booth Street sidewalk will be cleared in winter.



Figure 89 Royal Canadian Navy Monument (Source: NCC)

5.4. LEGIBILITY

The commemorative and interpretive elements should be legible and understandable, both from close up and at a distance.

The Monument will be most effective if viewers can readily comprehend what they are looking at, and derive from it information, awareness and understanding. While the commemoration's design can be artistically engaging, the commemorative content must also be legible.

The following guidelines should be considered:

- The silhouette of elements seen from certain vantage points is as important as surface treatment and detail;
- Text and sculptural detail should be clear and readable from intended vantage points;
- All text will be provided in English and French.



Figure 90 Legible text at the Canadian Firefighters Monument (Source: Globe and Mail)

5.5. APPROACHABILITY

The Monument should encourage viewers to approach and inspect details at close range, and to physically engage with the installation.

The best commemoration designs anticipate that people will want to explore the surfaces, forms and details in a variety of ways. Close and tactile examination of a commemoration often reflects a healthy curiosity and results in a greater appreciation of the work.

If parts of the Monument are intended to be “out of bounds”, they should be designed so that, to all intents and purposes, they are inaccessible.



Figure 91 Louis St. Laurent Memorial (Source: NCC)

5.6. DURABILITY AND EASE OF MAINTENANCE

Materials, finishes and components should be long-lasting, easy to maintain and vandal-resistant.

The Monument is intended as a permanent statement and so should be designed to endure over decades. The challenge is made only more acute by Ottawa's harsh climate, which involves long winters with significant snow-fall, freezing rain, frequent freeze/thaw cycles, as well as droughts and heat-waves in summer. Materials should be selected that will deal with severe conditions either by effectively remaining in their original condition or by weathering to a preplanned and stable state. Materials and components should be carefully selected and properly assembled to ensure long-term corrosion resistance, including resistance to salt. Snow removal should not be assumed within the Monument, and only basic seasonal maintenance consistent with a public park, performed by a generalized landscape contractor, can be anticipated. There will be no on-site staff presence at the Monument.

In-ground lighting is not permitted due to Ottawa's harsh climate. Other components dependent upon specialized operational or maintenance requirements should be avoided.

On occasion, the Monument may also fall victim to deliberate physical damage and graffiti. The design should permit evidence of these activities to be removed quickly and without damage. Anti-graffiti coatings should be considered where appropriate.



Figure 92 Graffiti-resistant materials and coatings are preferred

5.7. ENVIRONMENTAL RESPONSIBILITY

The design of the Monument should promote a healthy, sustainable environment.

Sustainable design seeks to reduce the amount of energy and other resources consumed in the construction and long term maintenance of the built environment.

The landscape portions of the Monument lend themselves perhaps most readily to this approach. Measures that should be considered include:

- On-site storm water management and low impact development;
- Energy-efficient lighting with controlled hours of operation and dark sky protection;
- Hardy, native, locally-grown, low-maintenance, non-invasive plants;
- Species to enhance bio-diversity and support species at risk, such as butterfly habitat;
- Increased tree canopy;
- Local and natural materials rather than highly processed materials;
- Recycled materials and reduced construction/fabrication waste.

The winning design will undergo an ecological characterization and an Impact Assessment to determine compliance with applicable regulations. Mitigation may be required to achieve compliance.



Figure 93 Precedent: Native plantings

5.8. PUBLIC SAFETY

The Monument design should ensure the safety of visitors and the passing public.

The Monument should be designed to comply with the principles set out by Crime Protection Through Environmental Design (CPTED).

Key principles include:

- Provide opportunities for natural surveillance by passersby;
- Avoid secluded places that cannot be easily surveilled or that offer hiding places;
- Avoid enclosed pedestrian routes or spaces from which there are limited means of escape;
- Ensure ease of maintenance as places in disrepair appear more dangerous and may attract people with bad intentions.

As a public place, the Monument should be designed in accordance with the highest safety standards. While perhaps straightforward at first glance, commemoration design often presents special safety challenges due to the very nature of these kinds of installations. The following guidelines are mandatory:

- Tripping, falling and climbing hazards must be avoided;
- Handrails must be provided for all stairs and guardrails must be provided for changes in elevation over 0.6 metres in areas to which the public has access;
- Sharp edges, spiky points and eye-level projections should be avoided or located out of reach;
- Sloping walkways over 5% (1:20) should be designed to meet applicable accessibility standards. Ramps over 6.7% (1:15) should be avoided.
- Stairs should also be avoided where possible, so that all areas of the Monument are accessible.

NATIONAL MONUMENT TO CANADA’S MISSION IN AFGHANISTAN
PROGRAM AND DESIGN GUIDELINES