

NATIONAL CAPITAL COMMISSION  
COMMISSION DE LA CAPITALE NATIONALE

<b>No.</b>	2020-P45
<b>To</b>	Board of Directors
<b>Date</b>	2020-04-23

**For** DECISION

### Subject/Title

Parliamentary Precinct Exterior Lighting Master Plan

### Purpose of the Submission

To obtain approval of the Board of Directors for the Parliamentary Precinct Exterior Lighting Master Plan.

### Recommendation

- THAT the Parliamentary Precinct Exterior Lighting Master Plan (ELMP) be approved subject to the following condition:
  - That the subsequent implementation projects for architectural and landscape lighting planned for in the ELMP be submitted to the NCC for review and approval; and
- THAT the preparation and signature of the federal approval document for the Parliamentary Precinct Exterior Lighting Master Plan be delegated to the Vice President, Capital Planning Branch.

#### Submitted by:

Pierre Vaillancourt, A/Vice President, Capital Planning Branch  
Name

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Signature

## 1. Authority

*National Capital Act*, sections 11 and 12

## 2. Project Description

- *The Parliamentary Precinct is the home of Canada's parliamentary system and the physical expression of our commitment to democracy and the principle of freedom. The picturesque landscape and architectural style of the Precinct are enduring visual symbols of our country, while the openness, accessibility and security of the public spaces are representative of the values treasured and celebrated by all Canadians. The Precinct provides the setting for the work of Parliamentarians and staff in a secure and efficient manner, but it is also the preeminent gathering place for public expression and celebration, as well as a place of quiet reflection.*
- The Parliamentary Precinct is arguably the most significant heritage and symbolic site in Canada. This unique ensemble of Gothic Revival architecture and picturesque landscape is considered among the finest in the world. The Centre Block, East Block, West Block and Library of Parliament have been designated by the Federal Heritage Building Review Office (FHBRO) as 'Classified' Federal Heritage Buildings, under the authority of the Treasury Board Policy on Management of Real Property. These buildings are key components of the two other 'Classified' designations, which have been given to both the Parliament Hill Grounds and Buildings, and to the Public Grounds, which fall under the *Historic Sites and Monuments Act*.
- A multi decade long plan for the complete rehabilitation of the buildings and grounds of the Parliamentary Precinct has been undertaken and is currently being updated. This rehabilitation is heralded as a major milestone project in the NCC's Plan for Canada's Capital (2017-2067), which also supports the development of a specific illumination scheme for the precinct.
- The Exterior Lighting Master Plan (ELMP) for the Parliamentary Precinct, is a document which provides guidance for planning illumination and enhancement of the site, landscape, and architecture of Canada's Parliamentary Precinct (The Precinct).
- The overall concept is "Jewels in the Night" which establishes a hierarchy throughout the Precinct to emphasize the primacy of the triad of Parliament buildings and the gothic revival ambiance of the Parliament grounds. General strategies in the plan focus on using new technologies and standards to highlight the buildings' architectural elements through the installation of new light fixtures within the landscape and, where feasible, on the buildings themselves.
- The ELMP covers an area which includes Parliament Hill, the West Sector zone, Blocks 1, 2, and 3 (located south of Wellington Street), Sparks Street, 1 Wellington Street, and the Senate of Canada Building. The proposed Lighting Strategy also considers neighbouring areas and major sites such as the Rideau Canal World Heritage Site, the National War Memorial, the Ottawa River, the Chateau Laurier and the Supreme Court.

- The ELMP will be implemented in phases as the rehabilitation of the buildings and landscape is undertaken throughout the Precinct. Each illumination project will be subject to review by the FHBRO and review and approval by the NCC.

### **Federal Heritage Building Review Office (FHBRO) Reviews**

- The ELMP was presented to the FHBRO for formal review in July 2014 and December 2018.
- In 2014, the FHBRO raised questions about certain elements of the ELMP and recommended that the plan take a holistic approach to include the landscape of the precinct.
- The revised plan was submitted for review in December 2018 and has been well received by the FHBRO, with some cautionary recommendations to ensure consistency over time, to minimize the addition of new lighting fixtures to buildings and heritage lampposts, and to avoid over-lighting of the landscape.
- The FHBRO recommended a strategy for commemorations and walls; that the architectural lighting of each building should, in addition to highlighting the heritage character defining elements, reinforce the spirit of the place and respect the ways Canadians interact with the various zones and buildings in the Precinct.
- The consolidated version of the ELMP includes three (3) additional supporting documents prepared by Heritage Conservation Services (HCS) between 2015 and 2019 and a user guide to assist with the implementation of the Master Plan.
- The detailed design lighting plans for the West, East and Center Blocks as well as for the landscape will be submitted for review to the FHBRO.

## **3. NCC Staff Analysis / Risks and Mitigations Measures**

### **Context**

Between 2014 and 2019, two important NCC plans were approved: the 2017 Capital Illumination Plan (CIP) and the Plan for Canada's Capital (2017-2067). Public Services and Procurement Canada (PSPC) is currently developing the update to the 2006 Long Term and Vision Plan (LTVP).

The ELMP was presented to the ACPDR in August 2014 and the committee was supportive.

Since that time, new developments have informed the ELMP, such as safety, security and universal accessibility requirements, as well as the need for compliance with the Federal Sustainable Development Strategy. Additionally, materials were developed by the proponent to provide a better understanding of the heritage landscape and buildings, which will in turn inform the final version of the ELMP.

The ELMP is consistent with and conforms to the NCC's Capital Illumination Plan (2017-2027) (CIP):

- The ELMP develops a sensitive and holistic approach to protect heritage buildings in the lighting strategy, thus minimizing the installation of lighting fixtures on the buildings' façades and roofs.
- An Exterior Lighting Working Group has been established by the proponent to ensure coordination between projects and consistency of the developed designs with the ELMP, the CIP and the *Standards and Guidelines for the Conservation of Historic Places in Canada*.
- The ELMP is a comprehensive document for project managers as they move forward with implementation projects. It is supplemented by:
  - The 2015 Character defining elements Study of the Precinct's buildings (revised in 2019).
  - The 2019 Heritage value of the landscape study (revised in 2019)
  - A lighting protocol and user guide.

#### 4. Strategic Links

- NCC Mandate to “set the long-term urban planning direction for federal lands and, guide and control the use and development of federal lands in Canada’s Capital Region.”;
- NCC 2019-2020 to 2023-2024 Corporate Plan, Corporate priority 4: “Initiate, renew and communicate land use plans, and provide timely and effective coordination of federal land use and design in the National Capital Region.”;
- Plan for Canada’s Capital, 2017-2067 (NCC);
- NCC Core Area Sector Plan (2005);
- NCC Capital Illumination Plan (2017-2027);
- Long Term Vision and Development Plan (2006) and update (SPIB, current);
- NCC Canada’s Capital Views Protection (2007);
- Standards and Guidelines for the Conservation of Historic Places (PC, 2010)

#### 5. Consultations and Communications

Extensive consultations were conducted by PSPC with the following project stakeholders:

- Parliamentarians (House of Commons, Senate, Library of Parliament)
- NCC staff
- City of Ottawa
- Federal Heritage Building Review Office (FHBRO)
- Heritage Canada (PCH)
- RCMP
- Parks Canada (Rideau Canal)
- Supreme Court of Canada

## 6. Next Steps

- FHBRO review of the West and East Blocks developed design for exterior lighting and associated landscape features.
- NCC review and approval as separate Level 2 projects for the West and East Blocks developed design for exterior lighting and associated landscape features (2021).
- Formal review by the Federal Heritage Building Committee (FHBC) of the Centre Block developed design for exterior lighting and overall landscape lighting.
- NCC review and approval as separate Level 3 projects for the Centre Block developed design for exterior lighting and overall landscape lighting.

## 7. List of Appendices

Appendix A – Location map

Appendix B – The Parliamentary Precinct Exterior Lighting Master Plan Executive Summary (updated 2019)

Appendix C – Summary of supplementary documents to the 2015 Parliamentary Precinct Exterior Lighting Master Plan (2020)

Appendix D – Excerpts of the minutes of ACPDR (August 21-22, 2014)

Appendix E – Parliamentary Precinct Lighting Protocol (2019)

## 8. Authors of the Submission

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Parliamentary Precinct Exterior  
Lighting Master Plan

Plan directeur d'éclairage extérieur  
de la cité parlementaire

2020-04-06

- ▭ Area of Interest  
Domaine d'intérêt
- NCC Land  
Terrains de la CCN





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PARLIAMENTARY PRECINCT

# EXTERIOR LIGHTING MASTER PLAN

LEMAY+CHA / LIGHTEMOTION, PROJECT NO. 50546  
FOR PWGSC, PROJECT NO. R.067305

FINAL REPORT – JANUARY 9TH, 2015

## CREDITS

### Consultants

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Scott Tweedie, Parks Canada (Rideau Canal)  
Maureen Kent, Supreme Court of Canada

# EXECUTIVE SUMMARY

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The Parliamentary Precinct Exterior Lighting Master Plan is a comprehensive long term guiding document for the night time illumination and enhancement of the site, landscape and architecture of Ottawa's Parliamentary Precinct.

The Plan supports the objectives of the Long Term Vision and Plan (LTVP), as well as the mandate of the Parliamentary Precinct Branch (PPB), to oversee, plan and manage the Parliamentary Precinct. This is affected through the identification and conception of a holistic lighting strategy intended for concurrent implementation with LTVP projects, and the ongoing stewardship of Parliamentary Precinct resources.

As a first step of the Exterior Master Plan project, a review of the physical, heritage and planning context of the Precinct, including a site audit and analysis, was undertaken. Based on the findings of this study, a detailed expression of the Exterior Lighting Master Plan in words and images was developed. Together these two parts of the mandate provide reference and direction; so that the coherency of the Plan is maintained as the designs for individual lighting projects are developed and implemented throughout the next 25 years.

The previous master plan for the area is 20 years old. The 1994 Parliamentary Precinct Exterior Lighting Strategy was prepared without the 30-year recapitalisation plan for the Precinct that exists at present. It did not cover the entire Precinct, only Parliament Hill.

It is now time to readdress the issue of lighting in the Precinct environment. The current plan must correct safety, security and technical issues, while enhancing the primacy and beauty of the site and all it contains.

The current plan approaches the site as an ensemble. It provides direction that makes sense across the Precinct, given the recapitalisation plan currently in progress. The site is not only a place of work for Parliamentarians and staff; it is a prime stage for demonstrations, a tourist attraction, as well as a national symbol of Canadian democracy, among other roles. With so many functions, the site is experienced differently by its varied users ranging from workers on the site to the public (both national and international). It is also experienced from off-site vantage points throughout the cities of Ottawa and Gatineau and from afar through media such a television and the internet. The Exterior Lighting Master Plan recognises and celebrates the site's uniqueness and its multiple roles. It is clear and strong, to respect the primacy of the site. It is also designed as part of the greater urban areas, and opportunities are provided for its extension along Confederation Boulevard and into Ottawa and Gatineau.

To ensure the success of the plan and the comprehension of the night time Precinct environment, each new lighting project must be conceived as an ensemble; part of a balanced whole which communicates a consistent message. Future designers must understand and respect the intent of the plan, so that all illumination projects fit within the hierarchy of the site, and do not upstage the National Symbols, such as the Centre Block and Peace Tower.

The Exterior Lighting Master Plan for the Parliamentary Precinct provides guidance and clear direction to future design teams, PWGSC, and stakeholders in the implementation of diverse lighting projects over the long term. It also provides an implementation strategy that identifies short, medium and long term implementation objectives, and a Class D Cost Estimate.

## Three Lighting Options

Three theme-based options provide different strategies for the night time illumination of the Precinct. Project stakeholders confirmed that the preferred option must incorporate portions of all three, with the Jewel in the Night option being the dominant theme.

### Jewel in the Night

Inspired by the image of a diamond, the lighting strategy uses a combination of frontal illumination and detail highlighting where façades are lit evenly so they appear cut out from the night sky. The buildings of Confederation Boulevard, particularly those of Parliament Hill, are imagined as sparkling jewels on a necklace.

### Creative Tension through Light and Shadow

This lighting strategy introduces the play between shadow and light to bring to the forefront the more dramatic and mysterious aspects of Parliament Hill's Gothic Revival setting, enhancing contrasts and natural tensions.

### Urban Clock

Inspired by the life of the Capital and the Precinct, this option overlays a program of dynamic lighting over base lighting derived from the other two options.

## The Preferred Option: Jewels in the Night

The preferred option is a hybrid of the three options described above, comprising the best elements of each. It is named Jewels in the Night, in recognition of its foundational concept of illuminated jewel buildings on the necklace of Confederation Boulevard. It combines frontal lighting, the illumination of architectural details and heritage, uplighting, grazing, and dynamic lighting effects for the special enhancement of the Peace Tower and Library of Parliament. With these lighting effects, a contemporary touch can be added to the site, while still respecting its heritage character.

Because of the architectural and landscape heritage context, all light must be neutral. A range of white light is used to highlight and define the quality of materials. For special seasonal events such as Christmas and Mosaika, provision is made for the incorporation of coloured light, however the coloured light is an exception rather than the rule and it is only to be used in limited locations during specific times and for a limited duration.

The necklace of jewels provides a means of understanding the hierarchy of illumination for different areas of the site and its architecture. The more facets there are in a jewel, the brighter it shines and the greater its value. The concept of Jewels in the Night uses multiple lighting techniques to express hierarchy, symbolic importance and value, ensuring that all buildings and places within the Precinct are faithfully represented. In addition to this architectural type of lighting, the preferred option integrates essential improvements to functional and operational lighting throughout the site.

The communication of a hierarchy of form and space through illumination is one of the primary objectives of the Master Plan. The Precinct is divided into 6 zones, and 4 light hierarchy levels

to express the relative importance of specific landscape areas and buildings.

The four light levels in the overall hierarchy of the site are established according to a gradation of intensity that brings immediate recognition of comparative prominence. The highest level is applied to the Centre Block and the Library of Parliament, followed by the East and West Blocks. The buildings that face onto Confederation Boulevard are next, with the side streets that connect Sparks Street to Confederation Boulevard being the lowest. Sparks Street is given a second level hierarchy of illumination to reflect its commercial atmosphere.

The plan below illustrates how the Precinct was divided into zones for the purpose of illustrating the different strategies of the Master Plan (see full size map with better resolution, on page 35). Table 1 on the following page, provides information on the specific lighting strategies applied for each individual zone.

**Fig. 1 Exterior Lighting Master Plan Zone Map**

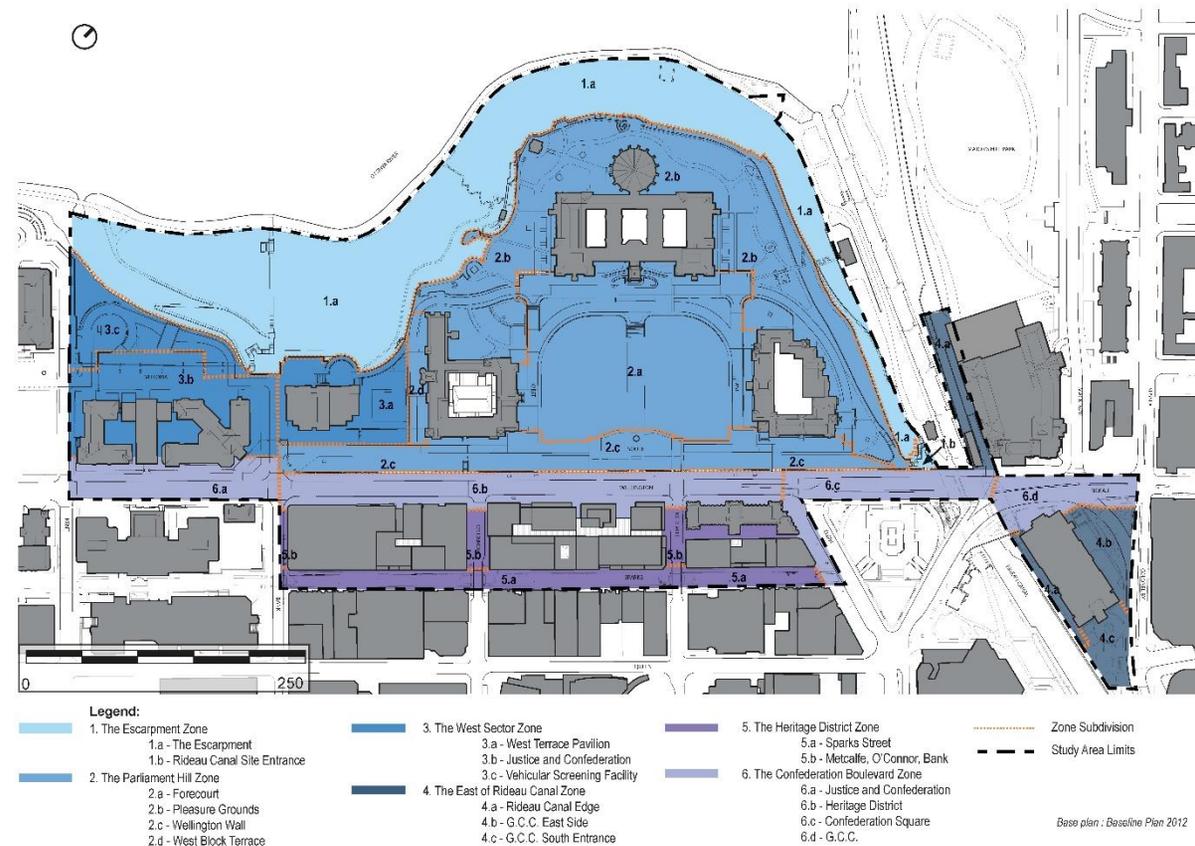


Table 1 - Lighting Strategies per Zone

	Architectural Lighting				Site Lighting			Architectural or Site Lighting	
	Grazing Lighting	Frontal Lighting	Detail Lighting	Hierarchy Level(s)	Heritage Lampposts ("Chanteloup" and its replicas)	Contemporary lampposts	Urban lampposts	Textured Lighting	Dynamic Lighting
<b>Zone 1 Escarpment</b>	No	No	No	N/A	No	No	Yes for stair linking the Hill to the Rideau canal: new traditional lampposts	No	No
<b>Zone 2 Parliament Hill</b>	Yes, in ground and on buildings	Yes	Yes	1 and 2	Yes Sub-zones 2a, 2b, 2c and 2d	Yes Wall along escarpment (sub-zones 2b, and 2d)	No	No	Yes Peace Tower / Library
<b>Zone 3 West Sector</b>	Yes, in ground and on buildings	No	Yes	3	Yes Sub-zones 3a and 3b	Yes Wall along escarpment (sub-zones 3a, 3b and 3c)	No	No	No
<b>Zone 4 East of Rideau Canal</b>	Yes, on buildings	No	Yes	3	No	No	Yes refurbished existing Rideau canal lampposts or their replicas (sub-zones 4a and 4c)	Yes Underpass under the ramp	No
<b>Zone 5 Heritage District</b>	Yes, on buildings that turn the corner from Confederation Boulevard.	No	Yes	2 and 4	No	No	Yes City lampposts to be standardized across Sparks Street and side streets of Bank, O'Connor and Metcalfe Streets.	Yes On Sparks Street	No
<b>Zone 6 Confederation Boulevard</b>	Yes in ground as space permits and on buildings	No	Yes	3	No	No	Yes Existing City lampposts to be refurbished	No	No

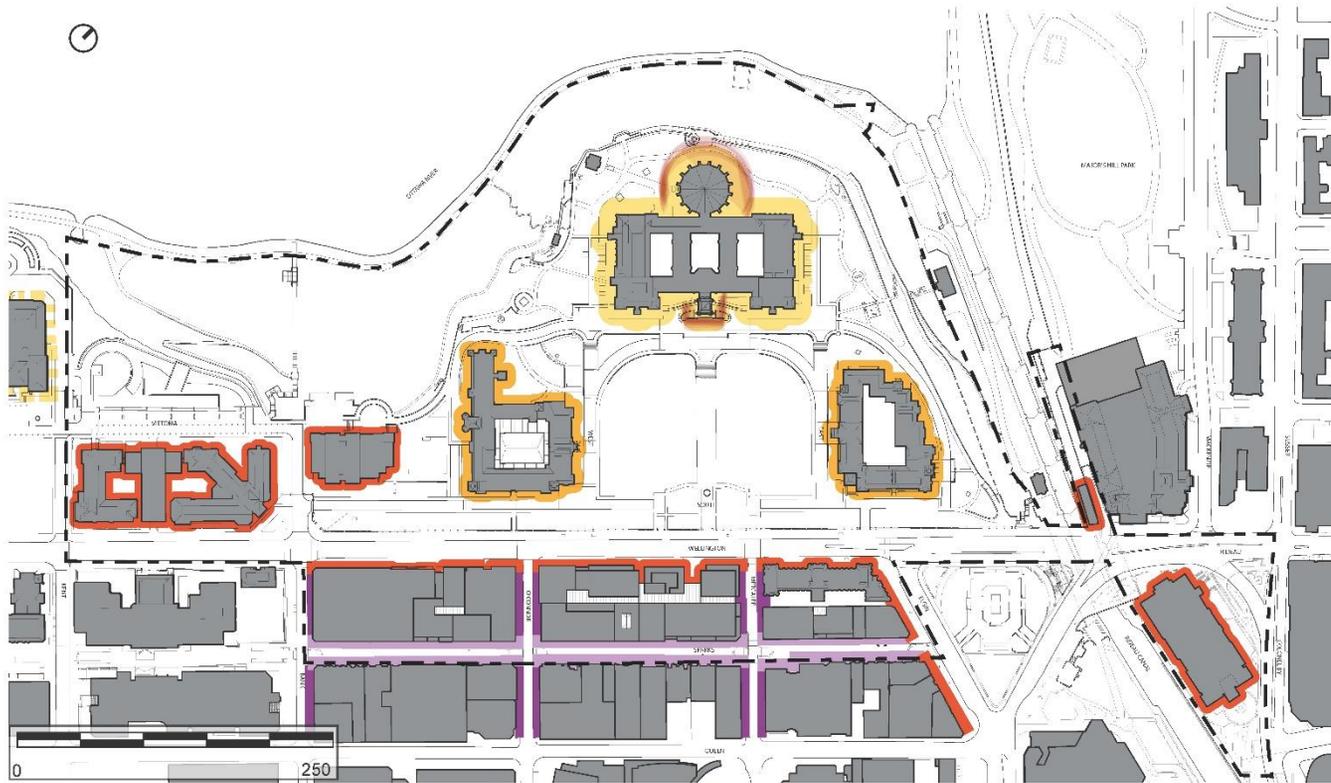


Fig. 2 Exterior Lighting Master Plan – Architectural Lighting Hierarchy Levels Map (see full size map with better resolution on page 26)



Table 2 - Components of Architectural Lighting Hierarchy Levels

	Hierarchy Level 1	Hierarchy Level 2	Hierarchy Level 3	Hierarchy Level 4
<b>Grazing Lighting</b>	Yes	Yes	Yes	Yes, only on buildings that turn the corner from the Confederation Boulevard
<b>Frontal Lighting</b>	Yes	Yes in zone 2 ; No in zone 5	No	No
<b>Detail Lighting</b>	Yes	Yes	Yes	Yes
<b>Intensity of Overall Illumination</b>	****	***	**	*

**Definitions:**

- **Grazing Lighting:** Close range façade illumination, within 5m of the building, using:
  - in ground lighting
  - fixture attached to the façade
- **Frontal Lighting:** Façade illumination coming for a distant source above ground, using
  - rooftops
  - heritage lamppost replica with add-ons
  - contemporary lamppost
- **Detail Lighting:** Used primarily to enhance the Character Defining Elements and prominent architectural features, using:
  - accent lighting
- **Intensity of Overall Illumination:** comparative intensity of illumination based on a graduation from high to low (\*\*\*\* High → \* Low).

Each hierarchy level integrates subtle variations as implementation conditions vary. The preferred concept is organised in a balanced and coherent manner to reveal the symbolic value of the site and its heritage value. Balance is made obvious through the overall hierarchical composition which relates the site to its urban context.

The overall illumination of the Parliamentary Precinct is essential to the visual enhancement of the night time experience of the site, from both near and far. The illumination strategies create clear, identifiable night time views that support the symbolic identification of the site.



**Fig. 3 Jewels in the Night: Proposed Architectural Illumination of Centre Block**

## Functional and Operational Lighting

Standards and codes have evolved in the last decades and most of the Parliamentary Precinct lighting conditions are no longer adequate. Over and above not meeting current safety codes, they are deficient in accommodating employees in their day to day activities. The replacement of sources throughout the Precinct and the addition of new technology lampposts and light fixtures will ensure that PWGSC meets its obligations as custodians and managers of accommodation for Parliamentarians and their support staff. The Master Plan calls for the improvement of lighting on all walkways, roadways, streets and pedestrian amenities. Maintenance is made to be cost effective and efficient, and meet federal sustainability goals.

## Integration

The heritage significance of the Parliamentary Precinct requires that a balanced approach be taken between the site's functional and operational requirements, including security, and the need to protect its heritage character. The Master Plan was developed in accordance with the Standards and Guidelines for the Conservation of Historic Places in Canada (2<sup>nd</sup> edition) and promotes installation approaches that are discreet, reversible and imply minimum intervention. The preferred option, for instance, calls for extreme care when attaching fixtures to façades or adding new lampposts in the landscape. Landscape lighting interventions are also discreet and minimal, blending in with existing heritage fixtures and the site's typology. Integration is a great challenge in this highly symbolic environment, and mitigation measures need to be considered. It is recommended that all lighting interventions for federally designated buildings and landscapes be developed in consultation with heritage conservation experts and must adhere to the Standards and Guidelines for the Conservation of Historic Places.

## Implementation Strategy and Cost Estimates

The implementation strategy is organised to address a number of priorities such as:

- Improving lighting conditions for the health and safety of users;
- Linking lighting projects and interventions to LTVP and rehabilitation projects;
- Re-establishing the prominence of the place in its urban context;
- Maintaining balance and continuity through the many years of implementation;
- Instilling interest and enthusiasm, and building momentum for the Exterior Lighting Master Plan;

Class D Cost Estimates, bound as a separate document, provide an order of magnitude cost for the Plan's lighting interventions, including associated controls but excluding infrastructure related work.

## Conclusion and Recommendations

The Master Plan is the vehicle to move the Precinct's exterior lighting project forward. One of the main recommendations that will allow the smooth resolution of the plan is the early identification of a lighting coordinator. This individual will see to the timely connection of lighting interventions with major projects to ensure appropriate funding. They will ensure that the vision, objectives and lighting strategy of the Plan are followed in good faith. They will also oversee the fine tuning of the plan over time, in order that the site is always functional, operational and safe throughout its lengthy implementation. To succeed, momentum needs to be built early in the process of the Exterior Lighting Master Plan's realisation. This can be achieved through the

installation of priority interventions that will provide effective and visibly beautiful lighting results.

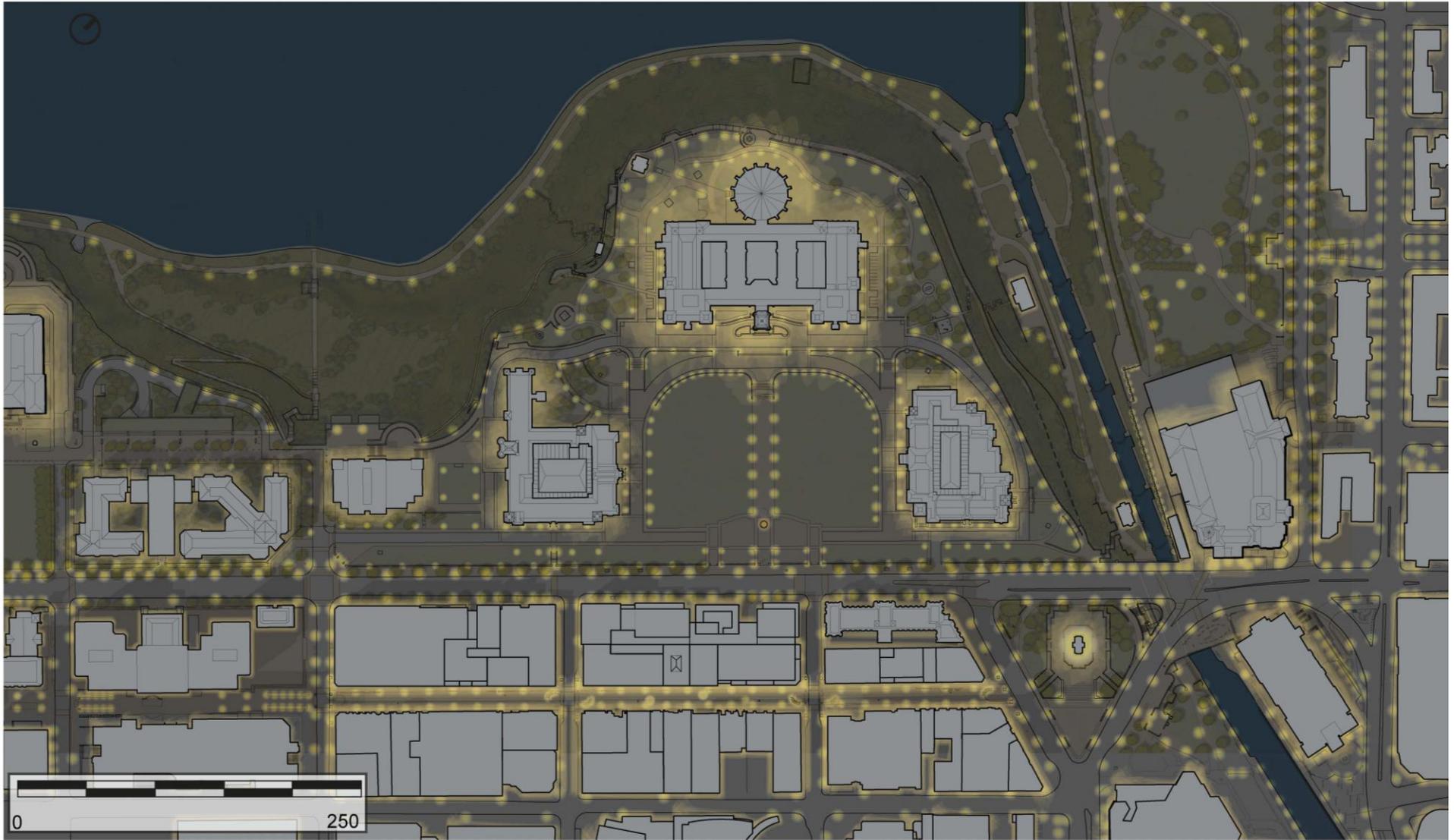


Fig. 4 Exterior Lighting Master Plan: Proposed Lighting Plan



Fig. 5 Proposed Night time View of Parliament Hill from South Drive, showing existing and new conditions



**Fig. 6 Proposed Night time View of Parliament Hill from Gatineau, Approximate NCC viewpoint #4**





## Summary of supplementary documents to the 2015 *Parliamentary Precinct Exterior Lighting Master Plan*

- ***Exterior Lighting: Heritage Character Defining Elements Study***
- ***Exterior Lighting: Heritage Values Study of the Landscape***
- ***Exterior Lighting: Lighting Protocol***

Parliament Hill is home to Canada's federal government, where representatives from across Canada gather to make laws that affect the lives of every Canadian. It is also much more. A place to meet, a place to celebrate, and a place to visit, Parliament Hill is the symbolic heart of our nation.

ensure that lighting improvements will enhance the established heritage character of the Precinct while providing reasonable safety, security, and navigation for its users. In all, it aspires towards ensuring that a consistent lighting approach will be undertaken across the Precinct.

The Science and Infrastructure Branch of PSPC has completed several studies on exterior lighting for the Parliamentary Precinct to replace the 1994 Parliamentary Precinct Exterior Lighting Strategy, prepared by Gabriel/design. The **Parliamentary Precinct Exterior Lighting Master Plan** prepared by lemay+CHA and Lightemotion was completed in 2015. PSPC's Heritage Conservation Services later completed the following technical studies to better integrate heritage knowledge into the Plan:

The vision of the 2015 *Parliamentary Precinct Exterior Lighting Master Plan* foresees a Parliamentary Precinct which will “enrich and elevate, for all Canadians and visitors, the nighttime experience of the historic, environmental and symbolic primacy of the site; thus highlighting the value and place of the Parliamentary Precinct at the heart of the National Capital, and affirming its connections to the cities of Ottawa and Gatineau.”

- **Exterior Lighting: Heritage Character Defining Elements Study**  
(Heritage Conservation Directorate, 2015, Revised 2019)
- **Exterior Lighting: Heritage Values Study of the Landscape**  
(Heritage Conservation Services 2019)
- **Exterior Lighting: Lighting Protocol**  
(HCS 2019).

The 2015 *Parliamentary Precinct Exterior Lighting Master Plan* defined the principles, tools and techniques to illuminate the Parliamentary Precinct with the intent of guiding all future lighting interventions within the site. The document provided a lighting concept, “Jewels in the Night”, and established a hierarchy for lighting within the Precinct, and initiated the discussion as to what should be illuminated based on the Heritage Character Statements and Statements of Significance.

The aim of this suite of documents is to provide a vision, principles, overall concept, and detailed guidance for the nighttime illumination and enhancement of the landscape and buildings of the Parliamentary Precinct. It is intended to assist project managers and consultants plan and design new lighting projects. Such informed decisions will

The Parliamentary Precinct includes 27 designated federal heritage buildings, the Parliament Hill National Historic Site of Canada (NHSC), the “Classified” Parliament Hill Public Grounds and the Sparks Street Heritage Conservation District.

To provide a richer understanding of which aspects of the buildings should be lit, PSPC's Heritage Conservation Services (HCS) published the *Exterior Lighting: Heritage Character Defining Elements Study (2015)*, which provided guidance for lighting all 33 buildings of the Parliamentary Precinct. In 2019, PSPC's HCS published the *Exterior Lighting: Heritage Values Study of the Landscape* which provides similar direction for grounds of the Parliament Precinct and recommendations to enhance the nighttime environment.

The lighting design protocol in the 2015 *Parliamentary Precinct Exterior Lighting Master Plan* was revised by PSPC's HCS, which led to the *Exterior Lighting: Lighting Protocol* to ensure heritage conservation advice is integrated into the earliest stages of planning and design of lighting projects in its earliest stages.

In 2017, the NCC approved the *Capital Illumination Plan 2017 -2027*, a document that provides a high level approach to lighting the Capital Core area. According to the NCC's document, "the detailed recommendations of the *Parliamentary Precinct Exterior Lighting Master Plan* influenced the proposed direction for the entire Capital Illumination Plan study area." The two documents are compatible, with the Parliamentary Precinct representing a sector within the NCC's plan, and the NCC's plan providing guidance for areas outside the Parliamentary Precinct.



Canada

Excerpt of the Minutes of the

Advisory Committee  
on Planning, Design and Realty

Meeting of August 21<sup>st</sup> and 22<sup>nd</sup>, 2014

2014-P45e - Parliamentary Precinct Exterior  
Lighting Master Plan (C)

Members received a presentation on the Parliamentary Precinct Exterior Lighting Master Plan. They offered the following comments:

The initiative received strong support from the committee.

The scope of the project should include all of Parliament Hill, including the Judicial Precinct, historic buildings and non-historic buildings alike on Parliament Hill.

Testing is key, and mock-ups should be done to study colour, tone, impact on subjects, skyline effects, impact on relief of building surfaces, sculptural effects, and glare.

Principles about environmental performance should be developed as well in the areas of night sky pollution, energy consumption, and environmental stewardship. Benchmarks should be established in order to measure the performance afterwards.

Lighting should not be too intense, nor brightly coloured in order to respect the dignity of Parliament Hill, which should be stated in the policy. Lighting should be gentle and respectful. Night and darkness should be allowed to exist as part of the plan; not everything should be lighted.

The operational issues should be part of the concept: possibility of black-out should be allowed for programming and cleaning purposes. Better performance and economics should be considered.

Seasonal decorative lighting should be considered in the plan as well as lighting for safety purposes. The proponent should collaborate with other

Extrait du procès-verbal du

Comité consultatif  
de l'urbanisme, du design et de l'immobilier

Séance des 21 et 22 août 2014

2014-P45f - Plan directeur d'illumination extérieure  
de la Cité parlementaire (C)

Les membres reçoivent une présentation sur le Plan directeur d'illumination extérieure de la Cité parlementaire. Ils offrent les commentaires suivants :

Le comité appuie fortement l'initiative.

La portée du projet devrait comprendre toute la colline du Parlement, y compris la Cité judiciaire, les bâtiments historiques comme les bâtiments non-historiques sur la colline du Parlement.

Les essais sont clé, et on devrait créer des maquettes pour étudier les couleurs, les tons, l'impact sur les sujets, les effets de ligne d'horizon, l'impact sur les reliefs des bâtiments, les effets sculpturaux, et l'éblouissement.

On devrait également élaborer des principes de performance écologique dans les domaines de la pollution du ciel nocturne, la consommation d'énergie, et la protection de l'environnement. On devrait établir des repères afin de mesurer la performance par la suite.

L'éclairage ne devrait pas être trop intense, ni comporter de couleurs vives afin de respecter la dignité de la colline du Parlement, ce qui devrait être stipulé dans la politique. L'éclairage devrait être discret et respectueux. On devrait permettre que la nuit et l'obscurité existent comme partie prenante du plan; tout ne devait pas être éclairé.

Les questions opérationnelles devraient faire partie du concept : la possibilité d'extinction des lumières devrait être permise à des fins de programme et de nettoyage. On devrait prendre en compte le meilleur rendement et l'économie.

Le plan devrait tenir compte de l'éclairage décoratif saisonnier ainsi que de l'éclairage pour des raisons de sécurité. Le proposant devrait collaborer avec



Canada

2014-P45e - Parliamentary Precinct Exterior  
Lighting Master Plan (C)

agencies and departments in order to harmonize day-to-day lighting and decorative lighting.

Members underlined their support for the pilot project concept as a way of testing results. They stressed that the Exterior Lighting Master Plan should be submitted to a formalized review process with opponents and proponents alike at the pilot stage, and as installation progresses, in order to bring balance to the concept.

Committee Secretary

2014-P45f - Plan directeur d'illumination extérieure  
de la Cité parlementaire (C)

d'autres agences et ministères afin d'harmoniser l'éclairage quotidien et l'éclairage décoratif.

Les membres soulignent leur appui vis-à-vis du concept de projet-pilote en tant que façon de tester les résultats. Ils insistent sur le fait que le Plan directeur d'illumination extérieure devrait être soumis à un processus d'examen avec des opposants ainsi que des proposant à l'étape du projet-pilote, et à mesure que l'installation progresse, afin d'apporter un certain équilibre au concept.

Secrétaire des comités

Caroline Bied

# PARLIAMENTARY PRECINCT LIGHTING PROTOCOL

The Parliamentary Precinct Exterior Lighting Master Plan (Iemay+CHA, Lightemotion, January 9, 2015) provides a high level vision and relative hierarchy for lighting within the Parliamentary Precinct. The Exterior Lighting Master Plan Heritage Character Defining Elements Study (HCS, 2015) and the Exterior Lighting Master Plan: Heritage Values Study of the Landscape (HCS, June 2019) provide recommendations for how to enhance the unique heritage character of the buildings and landscapes of the Parliamentary Precinct in the nighttime environment.

The purpose of this protocol is to provide a recommended process for project teams to follow when implementing lighting projects within the Parliamentary Precinct to ensure that every lighting project is in alignment with the principles of the and recommendations of the above mentioned documents.

This design protocol is not meant to replace standard project management processed followed by PSPC, including the need for consultations and reviews with stakeholders (Parliamentary Partners, RCMP, FHBRO, NCC, City of Ottawa, etc.) throughout the design and implementation process.

## ANALYSIS

### 1. Understand Heritage Value

Review existing site and the following documents to understand where the value of the historic buildings or landscape lies.

- Statements of Heritage Designation (Heritage Character Statement, Statement of Commemorative Intent (SOCI), Description of Designated Place);
- *Standards and Guidelines for the Conservation of Historic Places in Canada*;
- *Long Term Vision and Plan (LTVP)*;
- *Parliament Hill Landscape Plan, Vols, 1 & 2*, (Phillips Farevaag Smallerberg);
- *PH Landscape Plan Implementation Strategy and Guidelines* (Groupe CHBA-IBI)
- *Exterior Lighting Master Plan Heritage Character Defining Elements Study* (HCS, 2015);
- *Exterior Lighting Master Plan: Heritage Values Study of the Landscape* (HCS, June 2019); and,
- Additional reference documents included in the reference section of the above reports.

## 2. Establish Hierarchy Level of the Asset

Review the following documents to understand how your project fits within the overall context of the Precinct and the “Jewel in the Night” lighting vision, based on its zone and relative hierarchy.

- *Parliamentary Precinct Exterior Lighting Master Plan* (Iemay+CHA and Lightemotion, 2015); and,
- *Capital Illumination Plan, 2017-2027* (NCC).

## 3. Determine Project Requirements

### 4. Engage Architectural Historian / Conservation Specialist

Engage an architectural historian, conservation specialist or other resource with a strong understanding of the site, its styles and historical significance to review the relevant heritage character statements and background documents and to aid the project team in understanding the values of the asset. An architectural or landscape historian is particularly helpful to achieve a thorough understanding of classified buildings and landscapes, as well as for complex and large scale interventions.

## 5. Review Lessons Learned from other Parliamentary Precinct Lighting Projects

### 6. Consult Main Stakeholders

At a minimum, the Parliamentary Partners, PCO, PMO, NCC, FHBRO, and Security should be consulted to understand their requirements and to communicate the proposed process.

## 7. Complete Site Survey & Condition Assessment



Image Source: *Parliamentary Precinct Exterior Lighting Master Plan* (Iemay+CHA and Lightemotion, 2015)

## DESIGN

### 1. Identify Character Defining Elements / Heritage Values to be Illuminated

For designated federal heritage buildings, an architectural historian / conservation specialist should be engaged to aid the project team in identifying these elements. The Exterior Lighting Master Plan Heritage Character Defining Elements Study and the Exterior Lighting Master Plan: Heritage Values Study of the Landscape are two documents that also provide guidance for which elements should be lit.

## **2. Develop Lighting Design**

Develop a lighting design that respects the guiding principles and objectives of the various plans and heritage value guidelines.

## **3. Minimal Intervention Approach**

Minimize the impact of the lighting and its infrastructure on the character of the buildings and landscape as well as building occupants by reducing the number, visibility and scale of light fixtures and associated electrical systems as much as feasible.

## **4. Consult All Stakeholders**

Consult all stakeholders, including operational, security, and construction health and safety personnel to ensure that the design does not conflict with other requirements and meets the health and safety requirements of the site's users.

## **5. Initiate Regulatory Reviews (FHBRO, NCC)**

Any project that impacts federally designated landscapes or buildings typically require review by the Federal Heritage Buildings Review Office (FHBRO) and approval from the National Capital Commission (NCC). Depending on the scope of work, the project may also require a formal review by the Federal Heritage Buildings Committee (FHBC) and submittal to the NCC's Advisory Committee on Planning, Design and Realty (ACPDR).

## **6. Allow Sufficient Lead Time**

Allow sufficient lead time for stakeholders to review the lighting project and to coordinate with other pertinent lighting projects within the precinct.

## **7. Coordinate with Other Lighting Projects**

All lighting projects in the precinct should be coordinated so that the lighting levels and lighting colour temperatures are compatible with the overall lighting concept of the precinct and support its established hierarchies.

## **8. Allow for Adaptability**

All light fixtures should be adaptable with regards to light level intensity, so that lighting in each zone can be adjusted and balanced as needed to achieve the established lighting vision for the Precinct over a multi-year implementation process.

## **9. Design for Durability**

All light fixtures should be designed to withstand physical abuse that may be experienced during celebrations, such as Canada Day, as well as on-going maintenance activities and local winter climate conditions, especially snow accumulation and freeze-thaws.

## **10. Prepare Mock-ups**

Prepare mock-ups of lighting concepts as needed to determine appropriate colour temperatures and intensities, balance with adjacent lighting, reduce glare, and minimize impact on the asset. Mock-ups are an essential part of the design process to determine

appropriate colour temperatures and intensities, as well as impacts on the relief of building surfaces, sculptural effects and glare. They will also help identify potential impacts on the building occupants and security equipment. All projects should plan for mock-ups of lighting concepts as part of their scope of work. Ensure that the particulars of the mock-up are recorded for future reference (mock-up settings, achieved consensus; list of stakeholders present).

## **EXECUTION**

### **1. Monitoring**

Monitor the project implementation to ensure that it respects the approved design and meets on-going operational requirements. On-going monitoring and adjustment of lighting will ensure that the Exterior Lighting Master Plan's vision is respected over time as new projects are conceived of and implemented.