

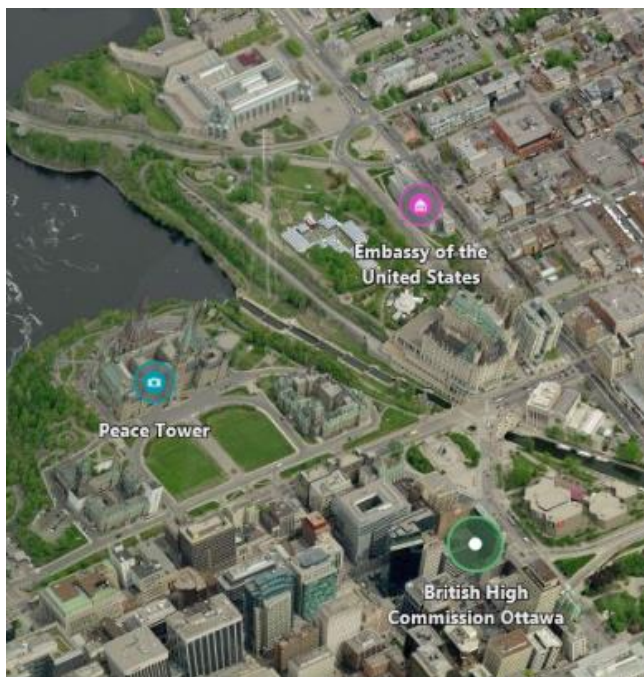
## EXECUTIVE SUMMARY

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### Security, Crime Prevention and Capital Planning: A Study of Two Embassies in Canada's Capital

In a post 9/11 world, fear of crime and terrorism in the West has become increasingly high, especially in areas of importance or pedestrian-heavy environments. As a result, planning of public spaces has started to shift towards more preventative measures of urban design to protect the public realm in some of the most vulnerable areas to these attacks. On the other hand, important buildings have also started to implement similar hardening and security features through environmental design. In response to these implementations, buildings of importance have been using a physical-structure based approach at planning urban spaces through Crime Prevention through Environmental Design (CPTED) and Anti-Terrorism (AT) planning.

This research project examined the links between Crime Prevention through Environmental Design (CPTED), Antiterrorism planning (AT) and its integration into the urban environment of two embassies on the ceremonial Confederation Boulevard in the downtown core of Ottawa, ON. The two embassies include the British High Commission and the US Embassy, both located near Parliament Hill. The objective of the study was to examine each embassy's use of security and CPTED, identify the embassy that better integrates security and CPTED with the surrounding urban environment and create a set of recommendations based on these findings. The research used evaluation criteria established through CPTED principles and Anti-Terrorism literature and government reports.



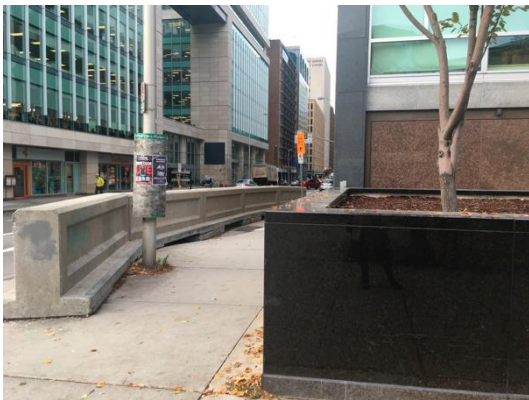
Map 1: Location of Embassies (Bing, 2017)



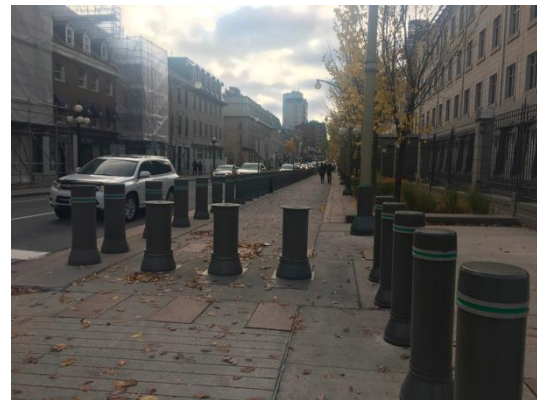
Figure 1: US Embassy (top), British High Commission (bottom). (US.GOV, 2016) (Capital Modern, 2015)

A site audit of the integrated security features of both sites was conducted in the Fall of 2016 and the Spring of 2017. The findings from the audit revealed some of the security features and integration issues on both sites. Some negative findings included:

- An abundance of security cameras
- Poor use of fences
- Obvious anti-terrorism features that attract attention
- Inconsistent use of security features
- Too much strengthening of the building (also known as target hardening)
- Not enough delineation of space



*Figure 2: Inconsistent security features at the British High Commission*



*Figure 3: Prominent security features at the US Embassy*

However, it is of some importance to note that there were some positive elements of the integration into the urban environment such as:

- The British High commission's security retrofit
- The use of natural features for target hardening at the pedestrian scale
- The use of security features to deter the opportunity for crime.







*Figure 4: British High Commission security retrofit*






















*Figure 5: Example of deterrence of crime at the US Embassy*

Here's how the embassies performed in the study of anti-terrorism principles and CPTED:

**EVALUATION SCHEME**

Does not fulfill 	Minimal fulfillment 	Somewhat fulfills 	Almost fulfill 	Fulfills criterion 
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**Table A: Evaluation of Embassies**

	US EMBASSY	BRITISH HIGH COMMISSION
<b>Anti-Terrorism</b>		
<b>Deter:</b> Deter terrorists from attacking the building through its design		
<b>Detect:</b> Detect and monitor potential threats		
<b>Deny:</b> Minimize or delay loss of life or building damage		 / 
<b>Devalue:</b> Make the building appear to be of little or no value or consequence		
<b>CPTED</b>		
<b>Target Hardening:</b> A hierarchy of power through the visible defense of the building		
<b>Access Control:</b> Deter crime through the delineation of boundaries and establishment of space		
<b>Environmental Support:</b> A design that takes into account the surrounding environment		
<b>Real/Symbolic Boundaries:</b> Identifying ownership of the space		
<b>Surveillance:</b> Maximizing ability to spot suspicious people or activities		

The previous table represents a summary of the evaluation of the criteria illustrated in chapter 4. The explanation of the criteria above is a summary and will be fully detailed in chapter 3, as well as in chapter 4 of this report.

**Table B: Criteria-Specific Recommendations**

	<b>US Embassy</b>	<b>British High Commission</b>
<b>Criteria</b>	<b>Recommendation</b>	
Deter	<i>No recommendation</i>	<i>Reinforce the sides of the building to establish a clearer boundary.</i>
Detect	<i>Revisit the use of highly visible security features.</i>	<i>No recommendation</i>
Deny	<i>No recommendation</i>	<i>Establish a larger security network along the building</i>
Devalue	<ul style="list-style-type: none"> <li>- <i>Create a more uniform and unobtrusive building.</i></li> <li>- <i>Revisit the use of visible security features.</i></li> <li>- <i>Extend the bicycle lanes</i></li> <li>- <i>Work at creating a building environment that blends in with the surrounding urban fabric.</i></li> </ul>	<i>No recommendation</i>
Target Hardening	<i>No recommendation</i>	<i>Implement more natural target hardening features along the perimeter of the building</i>
Access Control	<i>No recommendation</i>	<i>No recommendation</i>
Real/Symbolic Boundaries	<i>Work to create a more symbolic boundary – utilize the natural as well as built elements to their advantage</i>	<i>Work to create a more real boundary – utilize the natural as well as built elements</i>
Environmental Support	<i>Adapt the building’s façade and entrances to further support the public realm</i>	<i>No recommendation</i>
Surveillance	<i>Recommendation to revisit future use of visible surveillance measures</i>	<i>No recommendation</i>

The recommendations for each foreign embassy include:

- British High Commission:
  - Reinforcing the sides of the building in a similar fashion to the façade;
  - Take advantage of the urban environment for surveillance; and
  - Establish a better boundary
- US Embassy:
  - Extend the separated bicycle lanes past the embassy;
  - Create a secure and unobtrusive façade; and
  - Revisit the use of physical security features.

This research project promotes the use of security features in a way that better integrates with the current community design and security practices in Canada's Capital Region. Furthermore, it outlines strengths and weaknesses of the current systems used. It highlighted the role of security planners to take into account the effect the security features have on the surrounding environment to make decisions that would reduce the fear of crime, but also reduce crime opportunity. Through good planning and urban design, these spaces could be managed effectively and more seamlessly integrate themselves into the surrounding land uses to have a low-profile building with an abundance of physical security.