

**Report to
Rapport au:**

**Planning Committee
Comité de l'urbanisme
10 November 2020 / 10 novembre 2020**

**and Council
et au Conseil
25 November 2020 / 25 novembre 2020**

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Ward: CITY WIDE / À L'ÉCHELLE DE LA VILLE File Number: ACS2020-PIE-EDP-0032

SUBJECT: Bird-Safe Design Guidelines

OBJET: Lignes directrices de conception sécuritaire pour les oiseaux

REPORT RECOMMENDATION

That Planning Committee recommend Council approve the Bird-Safe Design Guidelines, attached as Document 1.

RECOMMANDATION DU RAPPORT

Que le Comité de l'urbanisme recommande au Conseil d'approuver les Lignes directrices de conception sécuritaire pour les oiseaux, annexées en tant que document 1.

BACKGROUND

Each year, millions of birds are injured or killed in collisions with buildings and other structures across Canada. Many of these collisions could be prevented by avoiding or reducing known risk factors in project design. The City's Protocol for [Wildlife Protection during Construction](#), approved by Council in October 2015, identified the need for design guidelines to reduce the risks to birds in Ottawa's built environment. Staff have reviewed examples from other major cities and agencies and have developed the attached Bird-Safe Design Guidelines to help inform building, landscape and lighting design decisions in public and private projects.

DISCUSSION

Birds perform vital roles in our environment such as distributing seeds, eating insects, and in some cases pollinating plants. They help to maintain the ecological health of wetlands, forests and valleylands, while also providing valuable pest control services for agriculture and forestry. Birds also keep Ottawa residents in touch with nature, even in the urban parts of the city, and add to our quality of life. The City of Ottawa recognises that birds are an essential part of our environment, and that their ability to survive in our city is related in part to the design of its buildings and structures.

Research has shown that bird strikes on buildings and other structures are the second largest anthropogenic cause of bird mortality in Canada and the United States, second only to predation by domestic cats. Each year, an estimated 16 to 42 million birds are killed across Canada from collisions with buildings. Locally, Safe Wings Ottawa estimates that such collisions kill approximately 250,000 birds per year. Victims of these collisions range from tiny hummingbirds and warblers to large raptors and waterfowl and include many species at risk.

While public perception often associates bird strikes with high-rise buildings, most collisions occur closer to the ground, where birds are most active. Houses and low to mid-rise buildings are responsible for 99 per cent of all collisions, largely due to the

much greater numbers of these buildings in our landscape, which results in a correspondingly high cumulative mortality rate. On an individual basis, large buildings (whether low, mid or high-rise) tend to have higher per-structure kill rates due to their greater surface area and, frequently, their more extensive use of glass and lighting. Targeted mitigation in these large buildings can substantially reduce bird deaths and can be readily achieved through development review processes for new buildings. Mitigating the broader risk to birds from existing buildings relies upon raising awareness of the issue and its solutions.

A significant body of knowledge on the causes and prevention of collisions has been amassed, based on years of experience in various jurisdictions. This has resulted in the identification of several design principles that can significantly reduce the risk of bird collisions. While often referred to as “bird-friendly” design, the term “bird-safe” is increasingly being used to more clearly identify design features and other factors that have been scientifically proven to avoid or reduce risks to birds. Some particularly important aspects of bird-safe design include:

- Treating glass to make it more visible as a barrier to birds.
- Eliminating design traps such as glass passageways or corners that are invisible to birds.
- Designing landscaping to reduce the risk of collisions.
- Designing and managing exterior lighting to minimize impacts on night migrating or nocturnal birds.
- Turning off or minimizing interior lighting, especially during spring and fall migration periods.

Bird-safe measures are not currently mandated under the Building Code at either a provincial or national level. However, several major cities in North America, including Vancouver, Toronto, San Francisco and New York, have adopted design guidelines or standards for use in their local planning decisions. The Canadian Standards Association (CSA) Group has also recently developed a National Standard of Canada for bird-friendly building design (CSA A460:19). Staff reviewed these documents and used them to develop a set of guidelines that suit our City’s context, which spans a broad range of settings from downtown core to rural. The City’s guidelines are consistent with the specifications provided in the CSA National Standard and the City of Toronto’s Green Standard.

The purpose of these guidelines is to inform building, landscape and lighting design at the planning stage of private or public development projects minimizing the threat of bird

collisions. Ottawa's Bird-Safe Design Guidelines are also applicable to other types of projects (e.g., building retrofits and life cycle renewals) and other structures that incorporate glass and glass-like panels (e.g. raised passageways, transit shelters, railings). While some aspects of these guidelines may not apply to every project, all should be considered during the planning and design stages to determine their relevance.

Once approved, the guidelines will be shared with all staff responsible for planning, designing and building City projects. Representatives from Design and Construction and Asset Management service areas were circulated on the draft guidelines and have contributed to their development. The study teams for major projects currently being planned have also been circulated on the draft (e.g., Ottawa Public Library – Library and Archives Canada Joint Facility, Barrhaven Light Rail Transit). The contracts for the Stage 2 Light Rail Transit projects currently underway were issued prior to the development of the City's guidelines, but included specifications requiring the use of bird-safe design measures.

The use of these guidelines will be promoted by City staff during the planning application and review process, particularly for site plans and some plans of subdivision (i.e., those located in or adjacent to natural areas and greenspaces). Specifically, the guidelines will be shared with applicants at the time of pre-application consultation so that bird-safe design measures can be considered early in the development process. They will also be added to the City's Guide to Preparing Studies and Plans web page, which outlines recommendations and requirements for development applicants.

In cases where City staff determine that bird-safe measures are necessary based on a project's context or conceptual design, or where such measures are recommended as part of an Environmental Impact Statement, conditions of approval may be applied to ensure that those measures are implemented. In such cases, specifications may be required to be shown or noted on accompanying plans and drawings where appropriate.

The guidelines also contain suggested treatments for existing buildings; however, the City does not have mechanisms to require the use of such measures outside of large-scale redevelopments requiring a *Planning Act* approval. The successful implementation of such retrofits therefore depends to a large extent on increasing the level of community awareness of the issue and the available solutions. The City has already treated an existing glass walkway at Ottawa City Hall, which is featured as an example in the Bird-Safe Design Guidelines and could further promote the use of these guidelines by publicly implementing solutions at municipal facilities where risks to birds are identified, as resources permit.

Staff note that the Ontario Court of Justice ruled in 2013 that sunlight reflecting from buildings in such a way that causes bird deaths constitutes a “contaminant” under the provincial *Environmental Protection Act* (Podolsky v. Cadillac Fairview, 2013). The property owner in that case was acquitted because they were able to demonstrate that they were taking reasonable steps to correct the problem by installing window films. This suggests that incorporating bird-safe design measures can reduce legal risks to building owners, by demonstrating positive action to avoid contraventions of the *Environmental Protection Act* and the *Migratory Birds Convention Act*, as well as the *Endangered Species Act* and/or *Species at Risk Act* in areas frequented by endangered or threatened bird species.

RURAL IMPLICATIONS

The guidelines will apply city-wide and will be used during the review of rural site plans and plans of subdivision. They also provide useful information to City staff, other agencies and residents for other types of projects and activities that could affect birds in the rural area.

CONSULTATION

A working group comprising representatives from key environmental and industry stakeholders, including local consultants, developers and building managers, was established to provide input to staff on the development of the guidelines. Safe Wings Ottawa and FLAP Canada provided extensive advice and comments at each stage of the project. The National Capital Commission was engaged in a similar project during the same timeframe and worked collaboratively with City staff. The working group was circulated on a preliminary draft of the guidelines in late February 2020 and was asked to provide their comments by the end of March.

The draft guidelines were revised based on feedback from the working group and were posted for public review and comment from June 22 through July 31, 2020. The working group was also circulated on the revised draft and was notified of the posting for public review. Public feedback was received via an online comment form and by email. In total, 55 separate submissions were received from members of the public, all of which were supportive of the project, although many commenters indicated they would prefer the guidelines to be mandatory. Many submissions urged the City to lead by example and apply these measures to all municipal projects going forward. Several recommended that the City should petition the provincial government for the authority to impose bird-safe measures on private developers as well. Toronto’s Green Standard was frequently referenced as an example.

LEGAL IMPLICATIONS

There are no legal impediments to the approval of this report. In the opinion of Legal Services, the role that the proposed guidelines will have is correctly characterized in this report. Legal Services is also in agreement with the summary provided of the decision in *Padolsky v. Cadillac Fairview*.

RISK MANAGEMENT IMPLICATIONS

There are risk implications. These risks have been identified and explained in the report and are being managed by the appropriate staff.

ASSET MANAGEMENT IMPLICATIONS

The recommendations documented in this report are consistent with the City's [Comprehensive Asset Management \(CAM\) Program](#) objectives. The implementation of the Comprehensive Asset Management program enables the City to effectively manage existing and new infrastructure to maximize benefits, reduce risk, and provide safe and reliable levels of service to community users. This is done in a socially, culturally, environmentally, and economically conscious manner.

The City will consider the opportunities to apply the Bird-Safe Design Guidelines for future projects.

FINANCIAL IMPLICATIONS

There are no immediate financial impacts associated with the approval of these guidelines. Significant resources would be required to assess the risks to birds at all existing City assets and implement recommended mitigation measures, due to the large numbers of buildings and other structures involved. Staff therefore recommend that existing assets should be addressed strategically as resources permit (see also Asset Management Implications). Staff involved in planning and designing new City projects will be able to use the guidelines to avoid or minimize risks to birds and can identify costs to mitigate any remaining risks as part of the project budget.

ACCESSIBILITY IMPACTS

The approved guidelines will be made available on the City's web site as an accessible PDF. The draft was provided to the public as an accessible PDF, and all web content for this project was developed in accordance with the applicable standards.

ENVIRONMENTAL IMPLICATIONS

The purpose of the Bird-Safe Design Guidelines is to assist project proponents, building owners and managers to reduce the risks to birds in our built environment, thereby reducing impacts to local and migrating bird populations, including species at risk, and overall biodiversity. Some of the measures recommended would also benefit energy conservation efforts. Therefore, the adoption and successful implementation of these guidelines would be environmentally beneficial.

Based on the legal precedent established by the Ontario Court of Justice in 2013, implementing bird-safe design measures would also demonstrate compliance with provincial and federal legislation such as the *Environmental Protection Act*, the *Endangered Species Act*, the *Migratory Birds Convention Act* and the *Species at Risk Act*.

TERM OF COUNCIL PRIORITIES

This project addresses the following Term of Council Priority:

- Environmental Stewardship

SUPPORTING DOCUMENTATION

Document 1 Bird-Safe Design Guidelines, August 2020 (attached separately)

DISPOSITION

Natural Systems and Rural Affairs to:

1. Post the approved Bird-Safe Design Guidelines (as an accessible PDF) on the City's web site; and,
2. Notify the project's stakeholders and interested City teams (e.g., Planning Services, Transportation Planning, Design and Construction, Asset Management) of the guidelines' approval.