



OFFICE OF THE
INFORMATION & PRIVACY
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Order F18-13

BRITISH COLUMBIA PAVILION CORPORATION

Celia Francis
Adjudicator

May 14, 2018

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Summary: A journalist requested access to the operations and maintenance manual for BC Place Stadium's retractable roof. PavCo withheld most of the manual under s. 15(1)(l) (harm to security of property and systems) and s. 21(1) (harm to third-party business interests). The adjudicator found that s. 15(1)(l) applied to the withheld information. It was not necessary to consider s. 21(1).

Statutes Considered: *Freedom of Information and Protection of Privacy Act*, 15(1)(l).

INTRODUCTION

[1] This case concerns a request for the operations and maintenance manual (manual) for BC Place Stadium's retractable roof. The applicant, a journalist, requested access to the manual under the *Freedom of Information and Protection of Privacy Act* (FIPPA) from the BC Pavilion Corporation (PavCo).

[2] In response, PavCo disclosed some of the records but withheld the majority under s. 15 of FIPPA (harm to law enforcement). The journalist asked that the Office of the Information and Privacy Commissioner (OIPC) review PavCo's decision to deny him access to the severed portions of the manual. He also complained that PavCo had not included the manual's appendices which he considered responsive to his request.

[3] Following mediation by the OIPC, PavCo disclosed some more records in severed form. It told the journalist that it was relying on ss. 15(1)(l) (harm to security of a property or system), 17 (harm to financial or economic interests

of a public body), 21 (harm to third-party business interests) and 22 (harm to third-party personal privacy) to withhold information.¹ Mediation was not otherwise successful and the matter proceeded to inquiry regarding all four exceptions.

[4] The OIPC received submissions from the journalist, PavCo and one of the third parties.² PavCo's initial submission addressed only ss. 15(1)(l) and 21(1). I gather that, at some point, PavCo decided to abandon its reliance on ss. 17 and 22, although the material before me does not say when or why.

ISSUES

[5] The issues before me are whether PavCo is:

1. Authorized by s. 15(1)(l) to withhold information; and
2. Required by s. 21(1) to withhold information.

[6] Under s. 57(1) of FIPPA, PavCo has the burden of proof regarding both exceptions.

DISCUSSION

PavCo

[7] PavCo is a BC provincial crown corporation whose mandate is to generate economic and community benefits for BC through its management of public facilities. It owns and operates BC Place Stadium in Vancouver, which is the largest sports, exhibition and entertainment venue of its kind in BC, with a seating capacity of 54,500.³

Information in dispute

[8] The 703-page manual concerns the operation and maintenance of the retractable roof and its computer interface system. The manual is a consolidation of the inspection and maintenance manual for the roof and seven other manuals on the following: drive control system; inflation and deflation system; garage control system; operations manual; installation manual for the roof's winter seal

¹ PavCo's decision letter also told the journalist that it was withholding some information on the grounds that it was outside the scope of his request. The fact report for this inquiry states that PavCo told the journalist that it was no longer withholding information as being outside the scope of his request. PavCo confirmed this in its initial submission at para. 5.

² The third parties are the contractors who were involved in the construction, operation and maintenance of the roof and who designed, implemented and wrote the manual. PavCo gave third-party notice to the four third-party companies and notified them of the inquiry. The OIPC also contacted the third parties to invite them to participate.

³ PavCo's initial submission, paras. 11-17; Affidavit of PavCo's Director, Facility Operations for BC Place Stadium, paras. 3-14.

panels; monitoring of the roof; and the roof control system. PavCo disclosed approximately 90 pages in severed form, withholding the rest in full. The withheld information, which is the information in dispute, consists of charts, diagrams, photographs, material lists and instructions.

Standard of proof for harms-based exceptions

[9] The Supreme Court of Canada has stated the following about the standard of proof for exceptions that use the language “reasonably be expected to harm”:

This Court in *Merck Frosst* adopted the “reasonable expectation of probable harm” formulation and it should be used wherever the “could reasonably be expected to” language is used in access to information statutes. As the Court in *Merck Frosst* emphasized, the statute tries to mark out a middle ground between that which is probable and that which is merely possible. An institution must provide evidence “well beyond” or “considerably above” a mere possibility of harm in order to reach that middle ground... This inquiry of course is contextual and how much evidence and the quality of evidence needed to meet this standard will ultimately depend on the nature of the issue and “inherent probabilities or improbabilities or the seriousness of the allegations or consequences”: *Merck Frosst*, at para. 94, citing *F.H. v. McDougall*, 2008 SCC 53 (CanLII), [2008] 3 S.C.R. 41, at para. 40.⁴

[10] Furthermore, there must be a “clear and direct connection” between disclosure of the particular information and the harm alleged.⁵

[11] I have taken these approaches in considering the arguments on harm in the parties’ submissions.

Harm to property or system – s. 15(1)(l)

[12] PavCo said that s. 15(1)(l) applies to all of the withheld information. This provision reads as follows:

15 (1) The head of a public body may refuse to disclose information to an applicant if the disclosure could reasonably be expected to
...

⁴ *Ontario (Community Safety and Correctional Services) v. Ontario (Information and Privacy Commissioner)*, 2014 SCC 31, para. 54.

⁵ Order F07-15, 2007 CanLII 35476 (BC IPC), para. 17, referring to *Lavigne v. Canada (Office of the Commissioner of Official Languages)*, 2002 SCC 53 (CanLII), [2002] 2 S.C.R. 773; *British Columbia (Minister of Citizens’ Services) v. British Columbia (Information and Privacy Commissioner)*, 2012 BCSC 875, para. 43.

- (l) harm the security of any property or system, including a building, a vehicle, a computer system or a communications system.

[13] BC Place Stadium is a building and I find that it is, therefore, a “property” for the purposes of this section. The information in dispute relates to the inspection, maintenance and operation of the retractable roof’s computer and mechanical systems (collectively, its roof systems). Computer systems are explicitly listed as an example of a “system” in s. 15(1)(l). I am also satisfied that the information on the roof’s mechanical systems relates to a “system” for the purposes of s. 15(1)(l). The remaining issue is whether disclosure of the information in dispute could reasonably be expected to harm the security of BC Place Stadium and its roof systems.

Parties’ submissions

[14] PavCo said that the manual details “in an intricate fashion how to construct, operate, and maintain the retractable roof at BC Place Stadium through a proprietary computer interface.” It submitted that disclosure of the manual would “assist any unauthorized person to operate and cause significant damage to the retractable roof, both physically in an operations room setting, or via access to the intermittent online access to the roof system.” PavCo said that the manual:

- is accessible only internally to a restricted number of BC Place personnel who deal directly with roof operation;
- sets out how to functionally operate the roof in a control room setting;
- provides explicit detail on how the computerized controls for the roof system interface with the mechanical and sensor components of the roof; and
- would allow one to instantly “ascertain how to create a malfunction and cause significant damage.”⁶

[15] PavCo said that each “deployment and retraction of the roof constitutes a major change in the structural and physical state of the roof” and must therefore be a “well prepared and thought through operation,” requiring many steps. PavCo said that the manual also contains information on the vulnerabilities of the roof’s mechanical and computer systems.⁷ PavCo said that the roof systems can be accessed offsite. Specifically, the third-party contractors have secure intermittent online access to the “integrated mechanical and computer systems” to ensure the roof is operated safely. PavCo said that “extensive precautions” (which it said it would not discuss, for safety reasons) are taken

⁶ PavCo’s initial submission, paras. 30-31.

⁷ PavCo pointed to examples of such information at pages 14, 51, 593, 596 and 601.

to ensure no unauthorized parties have remote access to the roof controls. It submitted, however, that “unauthorized access for nefarious purposes is a possibility as with every other network connected system.” PavCo said that access to the roof operation system, together with the information in the manual, “would allow for a cyber-attack to corrupt and damage the system.” Without the manual, PavCo said, a hacker would “have difficulty in causing damage to the retractable roof and threatening the safety of the public.” PavCo said that, in December 2016 alone, it was the target of over 58,000 “malicious cyber-attack attempts” on its computer systems and that its risk of cyber-attack is not “a mere possibility or probability, but a daily reality.”⁸

[16] The journalist said that, to his knowledge, there has never been a hacking incident that adversely affected the operation of a stadium anywhere in the world, including those with retractable roofs. In his view, disclosure of the manual might “serve to heighten interest and bolster the reputation of PavCo and B.C. Place for the impressive facility that it is.” He named aircraft and car manufacturers that, he said, have published their operations manuals. He added that information about other types of retractable roof systems and technology is available through patent filings.⁹

Discussion

[17] I have reviewed the records and find that the information in dispute consists of the following types of information:

- the detailed operating procedure to follow, both in person and through remote access, when opening or closing the roof;¹⁰
- conditions that must be present and the steps that must be taken in order to proceed safely with opening or closing the roof or for performing inspections;¹¹
- commands, alerts, warnings, error codes and error messages;¹²
- detailed instructions on what to look for during inspections;¹³
- detailed instructions on preparing the roof for winter and summer conditions, including where various components or systems are located;¹⁴
- how certain actions could result in damage to the roof;¹⁵

⁸ PavCo’s initial submission, para. 30; Affidavit of PavCo’s Director, Facility Operations for BC Place Stadium, paras. 15-19.

⁹ Journalist’s response submission, paras. 15-25, 44-46.

¹⁰ For example, pages 50-52.

¹¹ For example, page 50.

¹² For example, pages 43, 108-111,

¹³ For example, page 16.

¹⁴ For example, pages 609-615.

¹⁵ For example, pages 7 and 25.

- detailed technical descriptions of how the roof systems operate;¹⁶
- close-up photographs, data flowcharts and detailed electrical, schematic and structural diagrams of various components of the roof and its systems, including the computer system.¹⁷

[18] It is evident from the manual that much preparation and careful execution are needed to open and close the roof safely. Disclosed information in the manual indicates that the roof system must be secure and protected against manipulation by an unauthorized individual during service or maintenance work, and that only specialized staff may carry out service and maintenance work.¹⁸ I take from this that someone could have access to the roof for a legitimate reason but, using the withheld information, could then damage the roof systems.

[19] I can, therefore, readily see that disclosure of the withheld information would provide a hacker or another unauthorized person with a roadmap on how to compromise the security of the roof or otherwise damage the roof systems. For example, using the instructions on how to remotely access the roof's computer system and activate the roof systems, a hacker or another unauthorized person could: open or close the roof in unsafe conditions; deliberately fail to follow the correct sequence of steps in operating the roof systems; or cause physical damage or a malfunction. I am, therefore, satisfied that disclosure of the information in dispute could reasonably be expected to harm the security of BC Place and its roof systems.

[20] The journalist argued that elements of BC Place's systems, including its roof, "are in plain sight of the public, inside and outside of the stadium."¹⁹ I agree that the roof's general structure is obvious to the public. However, the information in dispute includes close-up photographs of the roof's structural components, both from the underside and the top of the roof, together with information on their purpose, function and operation. Such detail would not, in my view, be visible to the public.

[21] The journalist also suggested that the roof's control mechanisms are in secure areas not accessible to the public and that PavCo must have "multiple layers of checks and balances and security measures already in place," including secure passwords and verifications, to prevent unauthorized access to the roof system.²⁰ While this may be correct, I conclude that, in the event someone gained access to the roof and its control room, either in person or remotely, disclosure of the information in dispute would enable this individual to take control of the roof systems and cause damage, such as I have described above.

¹⁶ For example, pages 597-604.

¹⁷ For example, pages 50, 148-149, 193-205, 210, 613.

¹⁸ Page 49.

¹⁹ Journalist's response submission, para. 44.

²⁰ Journalist's response submission, para. 44.

[22] This finding is consistent with Order F11-14,²¹ in which the adjudicator found that s. 15(1)(l) applied to information which is similar in character to that in issue here.²² The adjudicator was satisfied that disclosure of the information in dispute in that case could reasonably be expected to harm the security of government computer systems, because it provided a “road map” for a hacker “to attack desired targets once inside the government’s security perimeter.”²³

[23] I have also considered orders which found that s. 15(1)(l) did not apply to the information in dispute. Order F14-37²⁴ and Order F13-07,²⁵ for example, found that s. 15(1)(l) did not apply to photographs and drawings of public structures, because the public bodies did not show a clear and direct link between disclosure of the information and the anticipated harms, particularly in light of the information available from visual inspection. In Order F09-13,²⁶ I found that s. 15(1)(l) did not apply to diagrams, drawings and other information on Canada Line’s systems, because, among other things, the information was general in character, some of the information was obvious to the public and the public body did not explain how its disclosure could reasonably be expected to result in harm under s. 15(1)(l).

[24] In my view, those cases can be distinguished from the one I am dealing with here. The hundreds of pages of information at issue here are not available to the public and contain extremely detailed procedures, instructions, drawings, photographs and other information on the operation and maintenance of BC Place Stadium’s retractable roof. Moreover, the roof structures themselves are not visible or obvious to the public, as noted above. PavCo’s submission explained how an unauthorized person could use the withheld information to damage BC Place’s roof systems. More significantly, it is, in my view, evident on the face of the records themselves how someone could use the withheld information to damage the roof systems.

Exercise of discretion

[25] Section 15(1)(l) is a discretionary exception to disclosure. Past orders have discussed factors a public body should consider in exercising its discretion

²¹ Order F11-14, 2011 BCIPC 19 (CanLII).

²² The information to which Order F11-14 found that s. 15(1)(l) applied included the following: how certain software applications ‘interact and interface’ with one another; “an organizational flowchart explaining how various government system servers interact with each other”; a table that ranked “various software applications in terms of their criticality to the system as a whole”, thus revealing vulnerabilities of the system; system technical specifications; and a diagram of system architecture.

²³ Order F11-14, at para. 22.

²⁴ Order F14-37, 2014 BCIPC 40 (CanLII).

²⁵ Order F13-07, 2013 BCIPC 8 (CanLII).

²⁶ Order F09-13, 2009 CanLII 42409 (BC IPC).

in deciding to withhold information. I must, therefore, be satisfied here that PavCo exercised its discretion in deciding whether or not to disclose the information, having regard for the relevant factors. I may order PavCo to exercise its discretion if it has not done so, or to reconsider if PavCo has exercised its discretion in bad faith, has considered irrelevant or extraneous factors or has not considered relevant factors.²⁷

[26] PavCo did not address this issue. However, I can see that PavCo conducted a line by line review of the manual. It disclosed many pages of general information on the operation and maintenance of the roof, giving the reader a good understanding of these matters, while also protecting information the disclosure of which could reasonably be expected to harm the security of BC Place Stadium and its roof systems. There is no evidence that PavCo considered improper or irrelevant factors or that it acted in bad faith in deciding to withhold some information, nor did the applicant allege that this was the case. I am satisfied that PavCo exercised its discretion properly in this case.

CONCLUSION

[27] For reasons given above, I find that s. 15(1)(l) applies to the information in dispute. Under s. 58(2)(b) of FIPPA, I confirm that PavCo is authorized to withhold the information it withheld under s. 15(1)(l). In light of this decision, I will not consider whether s. 21(1) also applies.

May 14, 2018

ORIGINAL SIGNED BY

Celia Francis, Adjudicator

OIPC File No.: F12-51752

²⁷ See, for example, Order 02-38, 2002 CanLII 42472 (BC IPC), at paras. 145-149, and Order F09-02, 2009 CanLII 3226 (BC IPC), at paras. 26-32.