



Safety Codes Council

COUNCIL ORDER NO. 2021-07

BEFORE THE ADMINISTRATIVE TRIBUNAL OF THE BUILDING SUB-COUNCIL

(the "Tribunal")

ON DECEMBER 14, 2021

IN THE MATTER OF the *Safety Codes Act*, Revised Statutes of Alberta 2000, Chapter S-1 (the "Act");

AND IN THE MATTER OF the cancellation of a permit in the building discipline held by [REDACTED] (the "Appellant"), File Number [REDACTED], for [REDACTED] on October 25, 2021 (the "Cancellation") by [REDACTED] (the "Respondent");

UPON REVIEWING AND CONSIDERING the evidence named in **The Record**, including written submissions of the Appellant and Respondent (the "parties"); and **UPON HEARING** the testimony of the parties at the virtual hearing;

IT IS HEREBY ORDERED THAT the Cancellation is CONFIRMED.

Appearances, Preliminary, Evidentiary, or Procedural Matters:

1. The hearing for this matter was conducted by virtual means.
2. At the commencement of the hearing, the Coordinator of Appeals confirmed the subject of the appeal as the Cancellation, and confirmed the names of those in attendance:
 - a) Appearing for the Appellant, the Tribunal heard from [REDACTED] and [REDACTED].
 - b) Appearing for the Respondent, the Tribunal heard from [REDACTED] (Legal Representative) and [REDACTED] (Safety Codes Officer).
 - c) Facilitating the hearing on behalf of the Safety Codes Council: [REDACTED] (Coordinator of Appeals and Co-Facilitator), and [REDACTED] (Co-Facilitator).
 - d) Attending as Technical Advisor for the hearing: [REDACTED] (Building Technical Advisor, Alberta Municipal Affairs).
 - e) Attending as observers for the hearing: [REDACTED]

3. The Coordinator of Appeals then introduced the Chair of the Tribunal (the “Chair”), [REDACTED] and turned the hearing over to him.
4. The Chair called the hearing to Order and introduced the other Tribunal members: [REDACTED]
5. Both parties confirmed there were no objections to any members of the Tribunal, and that the Safety Codes Council in general and the Tribunal in particular had jurisdiction to hear and decide the appeal. The Tribunal also confirmed they had jurisdiction to hear and decide this appeal.
6. The Chair then explained the process of the hearing, and advised of the list of the written material before the Tribunal, consisting of the documents listed below in **The Record** (see paragraph 8). The Appellant and Respondent confirmed that there were no objections to any of the material submitted to the Tribunal.
7. The Appellant submitted one piece of new evidence. The Respondent was provided an opportunity to review the new evidence and did not object to the submission of it to the Tribunal. The Tribunal accepted the additional evidence, it was marked as “**Exhibit 2 Appellant**” and was distributed to the parties, the Tribunal, the Co-Facilitators, and the Technical Advisor, with one copy retained for **The Record**.

The Record:

8. The Tribunal considered, or had available for reference, the following documentation:

<u>Item</u>	<u>Description</u>	<u>Date</u>
i.	Notice of Appeal from [REDACTED]	November 4, 2021
ii.	Council’s Acknowledgment Letter	November 8, 2021
iii.	Council’s Notification of Hearing Letter	November 15, 2021
iv.	EXHIBIT 1 APPELLANT – Appellant’s Appeal Brief	-
v.	EXHIBIT 1 RESPONDENT – Respondent’s Appeal Brief	-
vi.	EXHIBIT 2 APPELLANT – Additional Documentation	December 14, 2021

Issue:

9. This appeal concerns whether adequate information was provided in the permitting process to address safety concerns with respect to adjacent property protection under the *National Building Code – 2019 Alberta Edition* (the “Building Code”).

Positions of the Parties:

Appellant

From the Appellant's submissions and testimony, the Appellant's position is summarized as follows:

10. The Cancellation should be revoked, so that the permit is re-issued, as the Appellant has addressed the Respondent's concerns of adjacent property protection with respect to vibrations caused by pile installation and snow shadow.

Respondent

From the Respondent's submissions and testimony, the Respondent's position is summarized as follows:

11. The Cancellation should be confirmed, as the Appellant has not provided adequate information to ensure adjacent property protection.

Summary of the Evidence Provided On Behalf of the Appellant:

Evidence provided on behalf of [REDACTED] and [REDACTED]

12. The Appellant applied for a building permit for [REDACTED] (the "site") from the Respondent in July 2021. Additional information to support the permit application was requested and subsequently submitted by the Appellant in October 2021.
13. The additional information included a letter authored by [REDACTED] (Page 20 of **The Record**) which provided a professional opinion on the potential damage to an adjacent property from pile installation vibration and potential snow shadow (the "Appellant's Letter").
14. Stamped versions of the drawings (Pages 42 and 43 of **The Record**) were provided to the Respondent.
15. A permit was issued on October 22, 2021 (Pages 22-23 of **The Record**); however, the Cancellation followed on the basis that the Appellant's Letter was not acceptable as it did not meet the Association of Professional Engineers and Geoscientists of Alberta ("APEGA") standards and the permit information was incomplete, as it did not provide adequate information on adjacent property protection.
16. The Appellant is not aware of what they are contravening with respect to the Building Code.
17. On the issue of snow shadow, the differential in height and exposure factor would not lead to the generation of snow drift on the adjacent building.
18. The Respondent has not requested a detailed report on vibration impacts from pile driving until now. Originally, the questions from the Safety Codes Officer, [REDACTED] (the "SCO") were specifically with respect to how they would address the shadow on the existing building and vibration issues; these questions were answered in the Appellant's Letter. Accordingly, the Appellant's Letter is satisfactory in addressing the concerns of the Respondent and should be accepted to proceed with pile installation for the project.

19. █████ confirmed that based on previous experience with pile driving and foundations, as well as, the soil report, personal visits to the site, and observations of the adjacent building, he is confident that the Appellant's construction methodology will not create damage.
20. Experience with a similar project in █████ informed their construction method for this site. At the █████ project, the sheet piles that were used were much closer to the property line and accordingly it was necessary to control the level of vibration to an existing building, which was a two-storey with a basement. There was also different soil conditions and in addition, the utilities and surrounding building impact was to a lesser extent.
21. No damage to the adjacent property or facilities occurred at the █████ project (Pages 17-21 of **Exhibit 2 Appellant**), which has been put on hold for a litigation matter and not because of cancellation or suspension of the permits.
22. For this site, the proposed building is a six-storey apartment building where excavation occurs at the property line in only one location. The piles would be at least ten feet to the adjacent building to the east. For a shoring system, the Appellant is using temporary shoring along █████ and the rest is pre-cast foundation walls. The soil conditions at the site are more favourable than the █████ project and the excavation meets Occupational Health and Safety requirements. With respect to utilities, there is traffic light power supply under the sidewalks around the site and piles would not be within twenty feet of any deep utility.
23. The Appellant is willing and able to use techniques and equipment to monitor and reduce any potential damage to what is around the site.
24. The Appellant acknowledges that the Appellant's Letter is not properly authenticated and they are able to rectify and resubmit to the Respondent for consideration. Additionally, the Appellant is willing to provide an authenticated letter from █████, with respect to the opinion that no damage should result at the site given the soil conditions at the site pose a smaller risk than that at the █████ project (Page 14 of **Exhibit 2 Appellant**).
25. The Respondent has not set a standard for providing vibration calculations or a threshold on vibrations; accordingly, the Appellant feels they and this project have been arbitrarily singled out.
26. The Appellant is seeking that the hoarding permits for the site be issued following the revocation of the Cancellation and has expressed concerns over the Respondent's and a third parties breach of the *Freedom of Information and Protection of Privacy Act* (FOIP).

Summary of the Evidence Provided On Behalf of the Respondent:

Submissions made on behalf of █████

27. The Act, Building Code, and █████ Bylaws enabled a Safety Codes Officer to issue the Cancellation in this matter and informs the decision of the Tribunal with respect to confirming what the Respondent did in this situation.
28. The safety concern revolves around the consequence of driving piles in the ground with extreme force.

29. Speaking to Sentence 2.2.10.8. of the Building Code, the SCO had reasonable concern on the impacts of the pile installation, namely the resulting vibrations, and they have the authority to ask for more information and receive assurance that a project will not cause impact to other parties or properties.
30. The [REDACTED] Bylaw [REDACTED] (Page 46 of **The Record**) states that an accredited municipality has authority to pass bylaws on the administration of the Act. In section 8 of the Bylaw (Page 49-50 of **The Record**) in addition to other powers the [REDACTED] Manager or their delegate, may refuse to issue, and suspend or cancel a permit if incorrect or insufficient information is submitted. Therefore, the SCO's decision on this matter was not only supported by the Building Code, but also by the [REDACTED] Bylaws.
31. Adequate information must be provided to the Respondent to ensure the proposed project does not affect other parties or properties and the onus is on the project owner for assurance that vibrations will not cause issue to the adjacent property.
32. The Appellant's Letter was not satisfactory to the Respondent in providing the adequate and requested information due to its lack of site specific explanations and not identifying the considered factors.
33. The Respondent employs in-house engineers who may be asked to provide a second opinion on permit-related submissions.
34. The permit may be reissued where a professional engineer's report, in accordance with APEGA standards, is provided by the Appellant that details an opinion taking into consideration relevant calculations on magnitude and intensity of vibrations and confirms there is no material interference or impact to the adjacent property or building.
35. The information provided by the Appellants, to date, cannot be meaningfully analyzed by the Respondent's in-house engineers. Providing the requested calculations would allow the Respondent's professionals to be able to draw a conclusion and potentially allow the project to proceed.

Evidence provided on behalf of [REDACTED]

36. A partial Building Permit, "to construct partial excavation to a depth of 1.5m only to remove existing foundation and geothermal wells", was issued to the Appellant on August 5, 2021 in response to a request for a footings and foundations only building permit. Sufficient information, specifically relating to the effects of vibrations on existing building and utilities, was not provided to support the issuance of the requested footing and structural frame permit.
37. Following receipt of the Appellant's Letter in October 2021, another safety codes officer issued the building permit, "to construct a foundation and structural frame only apartment building" in error, as the Appellant did not address the necessary pile installation information.
38. The Cancellation was issued because the issuance of the permit was based on incorrect information being provided by the Appellant. The incorrect information was the Appellant's Letter, which was undated and did not adequately address the information requested with respect to pile installation.

39. Furthermore, the Appellant's Letter contained anecdotal information about another site and [REDACTED] [REDACTED] contacted the Manager of Permits for that authority having jurisdiction who informed him that they received complaints from neighbours from the vibration and noise, as well as, damage to equipment at adjacent offices ([REDACTED]). In addition, the site has been left dormant for some time now.
40. The Respondent requires applicants for new buildings to minimize impacts and ensure an unsafe condition will not exist. Where protective measures are required, these are the responsibility and at the cost of the applicant, not the Respondent.
41. It is an objective of the Building Code to protect adjacent properties. Accordingly, the Building Code authorizes an authority having jurisdiction to stop construction where an issue arises and ask for additional information from applicants. In addition, it places an onus on owners and constructors to ensure safety to adjacent properties.
42. The Respondent requires further information from the Appellant with respect to the installation of the piles. This information is necessary to determine any impacts to existing buildings and to circulate to utilities to ensure no damage or interruption to city services. This information has not yet been received.
43. The subject property is a proposed six-storey apartment building with an underground parkade. The site is a small lot surrounded by a street, avenue, and lane with an existing three-storey apartment building on the east side that is in close proximity to the property line.
44. There are water, sewer, gas, telephone and cable utilities in the street and avenue, as well as, overhead power lines in the lane.
45. The applicant has not provided any site-specific information to the Respondent to support the issuance of a footing and foundations only building permit.
46. The cancelled permit could be reinstated if the requested information is received and utilities reviews with no issues identified, as well as, confirmation that the adjacent building will not be adversely affected by the construction method. Alternatively, the Appellant can provide a third party review of the installation procedures from an industry professional, such as [REDACTED] [REDACTED].
47. The Respondent is looking for something quantifiable as to the vibration intensity; however, there are currently no prescriptive requirements set around this as it depends on numerous conditions.

Technical Advisor – Questions & Answers:

48. [REDACTED] was the Building Technical Advisor with Alberta Municipal Affairs present for the hearing. The role of the Technical Advisor is to clarify questions of the Tribunal regarding the interpretation of the relevant codes and any related code issues. The Tribunal deliberated on the questions for the Technical Advisor in camera. All parties including the Technical Advisor and observers reconvened in the virtual hearing room and the Chair posed the Tribunal's questions to the Technical Advisor and received the following responses:

49. Q: *Is there a vibration threshold in the code?*

A: Not aware of this being in the Building Code.

50. Q: *What does Code say about the affect of construction on adjacent buildings?*

A: Division B, Sentence 4.2.7.5. – (1) Deep foundation units shall be installed in such a manner as not to impair... (c) the integrity of neighboring buildings.

Division C, Sentence 2.2.2.1. – (1) Sufficient information shall be provided to show that the proposed work will conform to this Code and whether or not it may affect adjacent property.

Division C, Sentence 2.2.10.9. – (3) The constructor shall ensure that precautions are taken to safeguard the public and protect adjacent properties, ...

Division C, Sentence 2.2.14.2. – (2) The owner shall ensure that work undertaken does not damage or create a hazard to adjacent properties.

Division C, Sentence 2.2.14.3. – (1) The authority having jurisdiction may order the method of construction to stop and the equipment used in that method of construction to be removed if cranes or other equipment used in a particular method of construction ... (c) interfere with, disrupt activities on, or impede access to adjacent properties ...

There is also Division B, Part 8; however, this relates specifically to excavation whereas today's appeal is with respect to piles. Division B, Sentence 8.2.2.2.(1) does require adequate bracing when excavating to ensure protection of adjoining buildings.

51. Q: *Within the context of the Building Code and the Act, what is the role of a safety codes officer in the commercial permit approval process?*

A: Role of a safety codes officer is to conduct a thorough review of the permit application to assess and ensure that all design features proposed are in accordance with the Act and the Building Code.

52. Q: *Are the terms 'adjacent property' and 'adjacent building' the same?*

A: The two terms are not defined within the Building Code; therefore, we defer to the meaning given to the words in the Oxford English Dictionary (second edition). As this is not available right now, an assumption is made that 'property' includes everything within legal limits versus building would speak to the structures on the property.

Findings of Fact:

The Tribunal makes the following findings:

53. A Commercial Final Permit was issued to the Appellants on October 22, 2021 by the Respondent to construct a foundation and structural frame only for an apartment building (Pages 22-23 of **The Record**).

54. The Cancellation was issued as the Respondent determined the Appellant's Letter was not acceptable and a more detailed assessment was required that is authenticated to APEGA standards.

55. The Respondent's concerns are potential snow shadow on the adjacent property and potential vibrations from pile installation to the adjacent property and utilities.
56. A Street, avenue, lane and an existing three-storey apartment building to the east, surrounds the subject property.
57. The drawings (Pages 42-43 of **The Record**) do not feature site plan with dimensions, but oral evidence indicated the distance to the adjacent building is approximately ten feet or 3 meters and the Building Code sets out five meters as an adequate distance for snow drifting to not be a concern (Division B, Sentences 4.1.6.5. and 4.1.6.6.).
58. The Appellant's Letter does not sufficiently address the concerns of snow shadow and pile driving impact. Furthermore, it is not authenticated to APEGA standards.
59. The Respondent, specifically Safety Codes Officers, need to be satisfied there are no structural concerns to the proposed building, as well as, to adjacent properties.
60. On review of the supplied drawings, the pile schedule (Page 152 of **The Record**) does not indicate whether the load is a factored load or not. This could lead to errors in the pile design and installation.
61. Issues relating to the issuance of further permits for the project and any FOIP concerns between the parties and or third parties are not within the jurisdiction of this Tribunal.

Reasons for Decision:

62. On an appeal such as this, the powers of the Tribunal are set out in subsection 52(2) of the *Act*, the relevant excerpt is reproduced below:

52(2) The Council may by order

(a) confirm, revoke or vary an order, suspension or cancellation appealed to it...

63. The Cancellation was issued pursuant to subsection 46 of the *Act*, as well as, Division C, Sentence 2.2.10.7. and Division C 2.2.10.8 of the Building Code:

46 (1) A safety codes officer may suspend or cancel a permit if the safety codes officer, on reasonable and probable grounds, is of the opinion that the permit holder does not comply with this Act when acting pursuant to the permit or that the thing, process, or activity does not comply with this Act.

2.2.10.7. (1) The authority having jurisdiction may revoke a permit if
a) there is a contravention of any condition under which the permit was issued,
b) the permit was issued in error, or
c) the permit was issued on the basis of incorrect information.

2.2.10.8. (2)(b) The authority having jurisdiction may refuse to allow any building, project, work or occupancy if ... the information submitted is inadequate to determine compliance with the provisions of the Safety Codes Act, this Code or other legislation.

- 64. The Tribunal find based on the evidence before it that the SCO had reasonable and probable grounds to believe there was a safety concern given that structural risk to the adjacent property was not adequately addressed by the Appellant in terms of potential snow drift and effects of pile installation.
- 65. Adjacent property protection is of paramount importance in the Building Code and the onus is on the constructor to ensure this.
- 66. Given the distance between the two buildings, there is concern for snow drift, as well as, a chance of cosmetic damage to the adjacent building, and underground utilities, from the resulting vibrations of pile driving.
- 67. The Respondent is within their purview of asking for more information from the Appellant to address any possible safety concerns; this could include submitting calculations if requested, as noted in Division C, Sentence 2.2.4.5.(1) of the Building Code.
- 68. The opinion of the professionals involved, where they adequately address the safety concerns, should be afforded deference.
- 69. The Appellant’s Letter did not contain sufficient details, as it was not clear what information was being used or relied on to come to a conclusion. Sufficient details would include: being site specific, referencing a geotechnical report, demonstrating knowledge of the adjacent buildings construction, referencing specific relevant code clauses and containing a clear opinion on whether a structural risk to the adjacent property exists or not, taking into consideration all of the relevant elements. Reference to details on other projects can be included; however, should not be the sole basis for an opinion on another site. Lastly, for a professional engineer’s letter to be relied on by others it must be authenticated in accordance with APEGA standards.

Signed at the [REDACTED])
 in the Province of Alberta)
 this 28th day of January, 2022)

 Chair, [REDACTED] Administrative Tribunal