

APEGA members and permit holders are required to practise engineering and geoscience skillfully, ethically, and professionally. They must meet all prescribed requirements and follow all applicable legislation and regulations, such as the *Engineering and Geoscience Professions Act, General Regulation,* Code of Ethics, and APEGA bylaws. Investigation and enforcement—followed by, when necessary, judgment based on a fair hearing of the facts—are requirements of ours in service to the public interest. For more information, please visit www.apega.ca/enforcement/discipline-decisions.

Date: March 15, 2023

Discipline Case Number: 23-004

#### IN THE MATTER OF THE ENGINEERING AND GEOSCIENCE PROFESSIONS ACT AND IN THE MATTER OF THE CONDUCT OF STEVEN BONDER, P. Eng.

Pursuant to the Engineering and Geoscience Professions Act, being Chapter E-11 of the Revised Statutes of Alberta 2000 Regarding the Conduct of Steven Bonder, P. Eng.

The Investigative Committee of the Association of Professional Engineers and Geoscientists of Alberta (APEGA) has conducted an investigation into the conduct of Steven Bonder, P.Eng. (the "Registrant") with respect to a complaint submitted by [Name Withheld] (the "Complainant") dated April 17, 2020.

### I. THE COMPLAINT

The Complainant alleged that the Registrant engaged in unprofessional conduct and/ or unskilled practice arising from his involvement as a structural engineer who provided structural drawings for the construction of a unique, residential home that was being built by [Name Withheld] (the "Builder").

At the request of the Builder, the Complainant visited the partially constructed home and identified numerous structural deficiencies.

### A. ALLEGATIONS:

The Investigative Committee conducted an investigation with respect to the following allegations outlined in the Complaint:



1. Allegation #1: Inadequate pile design:

Whether the Registrant failed to fulfill his duties as the engineer of record by providing an authenticated, foundation drawing for a screw pile design that did not meet the acceptable standard of engineering practice in Alberta.

2. Allegation #2: Inadequate concrete slab design:

Whether the Registrant failed to fulfill his duties as the engineer of record by providing an authenticated drawing for the concrete slab design that did not meet the acceptable standard of engineering practice in Alberta.

3. Allegation #3: Inadequate design for the tall walls:

Whether the Registrant failed to fulfill his duties as the engineer of record by providing authenticated drawings for the tall wall design that did not meet the acceptable standard of engineering practice in Alberta.

4. Allegation #4: Plagiarism:

Whether the Registrant plagiarized and/or inappropriately used a proprietary template that contained notes and connection details that were created by and exclusively used by the Complainant and his company, [Name Withheld] ("Company A").

## II. AGREED STATEMENT OF FACTS:

As a result of the investigation, it is agreed by and between the Investigative Committee and the Registrant that:

### A. Background:

- 1. At all relevant times the Registrant was an APEGA Professional Member and was thus bound by the Engineering and Geoscience Professions Act and the APEGA Code of Ethics.
- 2. At all relevant times, the Registrant's company, SB Engineering Ltd., held a valid APEGA Permit to Practice and was thus bound by the Engineering and Geoscience Professions Act and the APEGA Code of Ethics.



### B. Scope:

- 3. The Registrant was retained by [Name Witheld] ("Company A")., to design:
  - i. a grade beam foundation,
  - ii. a concrete slab on grade floor system, and
  - iii. the exterior, tall wall system for the sailboat garage.
- 4. The Registrant was not engaged to provide the engineering design for the floor and roof truss system for the home; this was completed by [Name Witheld] ("Company B").
- 5. On October 30, 2019, the Registrant authenticated seven (7) drawings for the home that were to be used to obtain the building permit.

### C. Facts Relating to Allegation #1:

Whether the Registrant failed to fulfill his duties as the engineer of record by providing an authenticated, foundation drawing for a screw pile design that did not meet the acceptable standard of engineering practice in Alberta.

- 6. The drawing did not specify whether the screw pile loads were factored or un-factored.
- 7. Two columns, supporting a beam system above, had a concentrated load that was not adequately supported with a screw pile below the grade beam.
- 8. The 2-foot-tall grade beam was bucked down at two of the overhead garage door thresholds. The design did not include a screw pile at mid span and a detail for the loading specifications were not included in the design.
- 9. There were some screw piles in the design that specified concentrated loads that were deficient when compared to the floor truss manufacturer's loads. Some of the Registrant's loads were clearly undersized.
- 10. There was no adequate connection detail to show how the top of the screw pile (P1) is to be placed and connected to the grade beam.



11. There was no connection detail in the Registrant's drawing to show how the top of the screw pile is to be placed and connected to the concrete slab.

### D. Facts relating to Allegation #2:

Whether the Registrant failed to fulfill his duties as the engineer of record by providing an authenticated drawing for the concrete slab design that did not meet the acceptable standard of engineering practice in Alberta.

- 12. The slab was under designed for the specified loads (100lb live/25 dead) that were noted on the drawing.
- 13. As the slab contained hydronic in-floor heating, as identified in the architectural drawings, the specified thickness of the slab (100mm) was under designed.
- 14. Further, the concrete strength and the placement of the rebar (depth) was not identified on the drawing.

## E. Facts relating to Allegation #3:

Whether the Registrant failed to fulfill his duties as the engineer of record by providing authenticated drawings for the tall wall design that did not meet the acceptable standard of engineering practice in Alberta.

- 15. Insufficient connection details: On the drawings, in general, there were insufficient connection details provided. This is a standard expectation in industry that is critical to ensure the correct assembly of the structure.
- 16. Insufficient review: The drawings were not reviewed sufficiently to identify numerous errors such as:
- 17. On each drawing, in the General Notes section, the Registrant erroneously referenced that the design was in accordance with the ABC 2014, when the National Building Code of Canada Alberta Edition 2019, was in effect.
- 18. Insufficient number of king studs specified in some of the tall walls resulting in a deflection check failure, and an overall deficient structural design.
- 19. Specified an inconsistent number of king and jack studs at window openings that were the same size and located on the same wall. None of the openings had been properly designed.



20. Failed to reference the geotechnical report on which the foundation design was based (or failed to provide at a minimum, the assumed design criteria).

### F. Facts relating to Allegation #4:

Whether the Registrant plagiarized and/or inappropriately used a proprietary template that contained notes and connection details that were created by and exclusively used by the Complainant and his company, 18 Engineering Ltd.

- 21. The Registrant's October 30, 2019 drawings included the identical notes and details that were found in the Complainant's drawings completed in 2017.
- 22. The Registrant acknowledged that he did not create those notes and details.
- 23. The Registrant acknowledged that when he received the complaint about plagiarism, he stopped using the template and developed his own notes and details.

## III. CONDUCT

### A. Section 44(1) of the Act:

- 24. The Registrant freely and voluntarily admits that the conduct as described above constitutes unprofessional conduct and unskilled practice as defined in Section 44(1) of the *Act*.
- 25. The Registrant acknowledges that the conduct described above is conduct that is detrimental to the best interests of the public, contravenes the Code of Ethics as established under the regulations, harms or tends to harm the standing of the profession, and displays a lack of skill in the carrying out of his duties as required by the profession, contrary to Section 44(1) (a), (b), (c) and (e) of the *Act* as defined below:

## Section 44(1) of the Act:

44(1) Any conduct of a professional member, licensee, permit holder, certificate holder or member-in-training that in the opinion of the Discipline Committee or the Appeal Board

(a) is detrimental to the best interests of the public;



- (b) contravenes a code of ethics of the profession as established under the regulations;
- (c) harms or tends to harm the standing of the profession generally;
- (d) displays a lack of knowledge of or a lack of skill or judgment in the practice of the profession or;
- (e) displays a lack of knowledge or lack of skill or judgment in the carrying out of any duty or obligation undertaken in the practice of the profession.

Whether or not that conduct is disgraceful or dishonorable, constitutes either unskilled practice of the profession or unprofessional conduct, whichever the Discipline Committee or the Appeal Board finds.

## A. APEGA Code of Ethics:

26. Further, the Registrant acknowledges and admits that his conduct was also contrary to the Rules of Conduct 1, 3 and 4 of the APEGA Code of Ethics, as defined below:

APEGA Code of Ethics - The Rules of Conduct:

- 1. Professional engineers and geoscientists shall, in their areas of practice, hold paramount the health, safety and welfare of the public and have regard for the environment.
- 2. Professional engineers and geoscientists shall undertake only work that they are competent to perform by virtue of their training and experience.
- 3. Professional engineers and geoscientists shall conduct themselves with integrity, honesty, fairness and objectivity in their professional activities.
- 4. Professional engineers and geoscientists shall comply with applicable statutes, regulations and bylaws in their professional practices.
- 5. Professional engineers and geoscientists shall uphold and enhance the honour, dignity and reputation of their professions and thus the ability of the professions to serve the public interest.



### IV. RECOMMENDED ORDERS:

On the recommendation of the Investigative Committee, and by agreement of the Registrant with that recommendation, and following a discussion and review with the Discipline Committee Case Manager, the Discipline Committee hereby orders that:

- 27. The Registrant shall be reprimanded for his conduct and this order shall serve as the reprimand.
- 28. The Registrant shall provide written confirmation to the Director, Enforcement that he has completed the following educational sessions within six (6) months of the date this order has been approved by the Discipline Committee's Case Manager:
  - a. Proof of attendance (in-person or virtual) that he has attended an APEGA Permit to Practice seminar.
  - b. Proof of completion of APEGA's Online Ethics Module (available as of April 2023).
- 29. The Registrant on behalf of his company, SB Engineering Ltd., shall provide the Director, Enforcement, within six (6) months of the date this order is approved by the Discipline Committee Case Manager, a Professional Practice Management Plan (PPMP) that complies with the current APEGA Practice Standard (Professional Practice Management Plan Standard, May 2022).

*Note: If* there are extenuating circumstances, the Registrant may apply to the Director, Enforcement for an extension prior to the deadline.

30. Restricted practice: The Registrant shall have their practice restricted and only practice structural engineering under the direct supervision and control of a registered structural Professional Engineer.

The restricted practice time period shall commence from the date this Order is approved by the Discipline Committee Case Manager and remain in effect until the Registrant has submitted his next three (3) consecutive project drawings to an approved supervisor. The structural drawings shall be for projects that are similar or more advanced in complexity to those that were the subject of the investigation. This further includes:

a. The registered structural Professional Engineer providing the direct supervision and control shall be known as the Supervisor.



- b. The Registrant shall submit in writing to the Director, Enforcement the names, qualifications, position title, and contact information of three registered-Professional Engineers willing to provide the required direct supervision and control as defined in clause (a). The Director, Enforcement, will decide on the final selection of the Supervisor.
- c. The Registrant shall not practice structural engineering, as defined in the *Engineering and Geoscience Professions Act*, Definitions, Section 1(q), independently while under direct supervision and control.
- d. The Registrant's restricted status shall be noted in APEGA's Member Directory.
- e. The requirements of direct supervision and control are defined in s. 3.1 of the *Relying on the Work of Others and Outsourcing* Practice Standard.

https://www.apega.ca/docs/default-source/pdfs/standards-guidelines/relyingon-the-work-of-others-and-outsourcing.pdf?sfvrsn+45759b55\_20

- f. Any Professional Work Products (PWP's) completed by the Registrant during the restricted practice time period must be reviewed and authenticated by the Supervisor as outlined in the APEGA Practice Standard *Authenticating Professional Work Products*.
- g. Meetings and correspondence where the Registrant provides recommendations or advice must be directly supervised by the Supervisor.
- h. The Registrant shall not manage or supervise other professional registrants or Members-In-Training.
- i. All costs related to the supervision and required reporting shall be at the expense of the Registrant.
- j. The Supervisor shall enter into an undertaking with APEGA to provide the required direct supervision and control and reporting. This undertaking will comprise of a form provided by APEGA.
- K. The Supervisor shall provide the Director, Enforcement with a written report (in a format provided by APEGA) following his review of the Registrant's 3 projects.



- i. The report shall include a brief summary of the project, a description of the Registrant's role and responsibilities, a list of all PWPs related to the project where the Registrant was the primary contributor, and the Supervisor's assessment of the Registrant's overall competency related to the work.
- ii. The Supervisor shall ultimately attest to the Registrant's competency in structural engineering.
- iii. The Supervisor's report shall be deemed a Professional Work Product, requiring authentication.
- I. At the conclusion of the supervised practice the Director, Enforcement will review the Supervisor's written assessment and may discuss further details with the Supervisor. If the Director, Enforcement deems that the Registrant's competency remains unsatisfactory, the Registrant shall be indefinitely restricted from the practice of structural engineering until he can demonstrate competency to APEGA. This indefinite restricted status shall be reflected in APEGA's Member Directory.
- 31. This matter and its outcome will be published by APEGA as deemed appropriate and such publication will name the Registrant.

IN WITNESS WHEREOF the undersigned agrees with the Agreed Statement of Facts and Acknowledgment of Unprofessional Conduct in its entirety.

Signed,

STEVEN BONDER, P.Eng.

**PETER BOZIC**, P.Eng., M. Eng. Panel Chair, APEGA Investigative Committee

**DAVID WOODALL**, P.Eng. Case Manager, APEGA Discipline Committee

Date: March 15, 2023