# **Recommended Orders**

Date: November 16, 2017

Case No.: 17-013-RDO

# IN THE MATTER OF THE ENGINEERING AND GEOSCIENCE PROFESSIONS ACT, AND IN THE MATTER OF THE CONDUCT OF MICHAEL STAPLE, P.ENG.

The Investigative Committee of the Association of Professional Engineers and Geoscientists of Alberta (APEGA) has conducted an investigation into the conduct of Michael Staple, P.Eng. (the "Member") with respect to a complaint initiated by [Complainant A] (the "Complainant") dated May 30, 2016 (the "Complaint").

#### A. THE COMPLAINT

This complaint is regarding two adjacent homes located in southwest Calgary, Alberta. An excavation to repair a damaged sewer line was conducted at the front of the Complainant's home in the fall of 2013, which allegedly caused damage to the neighbour's foundation.

The Complainant's neighbour witnessed the excavation that bordered the property line and noted the soils of the excavation site had significantly settled and appeared similar to a sinkhole. The neighbour also noted cracks in their foundation wall and attached sunroom. The neighbour sought engineering opinions to assist with her concerns and retained Michael Staple, P.Eng. (the Member), from [Company B].

The Complainant alleged that the Member engaged in unprofessional conduct and/or unskilled practice arising from the Member's inspections and subsequent reports. The Member's reports directly attributed the neighbour's foundation concerns to the Complainant's excavation and lack of surface water management. The Complainant further alleges that the reports were based on visual inspections only and did not entail any engineering work to substantiate the findings.

The findings documented in the Report led to a costly civil suit that was launched by the neighbour against the Complainant that was ultimately unsuccessful.

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

- Whether the Member engaged in unprofessional conduct or unskilled practice when he authored an inspection report, dated June 8, 2015, and a subsequent report dated August 24, 2015. The neighbour retained the Member a second time to review a report that was completed by [Company C], dated June 12, 2015. [Company C] was retained by the Complainant. The Panel investigated whether the Member:
  - a. Conducted an inspection and made determinations and recommendations regarding cracks in a concrete foundation wall based only on a visual inspection and the testimony of his client.
  - Based on the visual inspection, determined the neighbour's foundation problems were caused by the Complainant's excavation to repair the sewer line.
  - c. Formed conclusions that did not accurately consider the soil conditions and the zone of influence.
  - d. Did not consider and/or provide other possible reasons or causes as to why the neighbour's foundation or sunroom incurred cracks or settlement.
  - e. Erroneously referred to the soils of the area as consisting of silty sand overlying gravel.
  - f. Provided recommendations for repair to the homeowner that were based on unconfirmed site and soil conditions.

# **B. AGREED STATETMENT OF FACTS**

### Background

- 2. The Member was retained by [Complainant A's neighbour] (the "Client"), to provide an inspection regarding cracks she observed in the home's basement foundation wall and on the stucco wall of their attached sunroom. The Member conducted an onsite inspection on May 30, 2015.
- The Member was informed by the Client that an excavation took place at the front of the Complainant's yard and it was located near the property line of the neighbour.
- 4. The Member learned that the excavation was needed to repair a damaged sewer pipe on the Complainant's property, shortly after the floods had swept through the Calgary area in June 2013.
- 5. Based on the information provided to him by his Client and by his own visual review, the Member provided his report which contained his opinion as to the probable cause that would have created stress on the foundation of the Client's home.
- 6. In his Report dated June 8, 2015, the Member indicated:
  - a. The material used as backfill in the excavation was native silty sand.
  - b. There were no eavestroughs located on the Complainant's home and surface grading appeared to drain surface water towards the excavated area.
  - c. The stratigraphy of the area consisted of silty sand overlying gravel and that water can easily flow through the soils, leading to the migration of fine soils into the underlying gravel.
  - d. As the fine soils washed away, a small sinkhole appeared. This movement of the silty sand has led to the softening of the foundation soils and ultimately caused the cracking of the neighbor's foundation.
  - e. The sinkhole, if not repaired, will continue to increase in size and further damage the client's residence.
  - f. Repairs for the sinkhole could be made and he provided recommendations.

- On October 3, 2014, the Client filed a Civil Claim against the Complainant for damages to their home as a result of the Complainant's excavation. The Client relied on the Member's reports which confirmed the damages and their cause.
- 8. In defence of the Civil Claim, the Complainant retained [Company C] in the spring of 2015 to inspect and provide their assessment of the neighbour's allegations. A site visit was completed and a Report was produced dated June 12, 2015. The findings of the Report contradicted the Member's findings, stating: "Based on the information gathered during this assessment, a settlement analysis due to excavation using current methods indicated that the noted excavation should and would not cause any settlement to the Plaintiff's (Client's) House."
- 9. A follow-up inspection report was completed by the Member on August 24, 2015. The report consisted of a review of the [Company C] report that was commissioned by the Complainant. The Report indicated:
  - a. That based on the Member's company's work history in the area, the soils consist of silty sand or sandy silt.
  - b. The Member maintained their original assessment; that being that water could flow through the soils due to the Member's previously identified conditions:
    - i. lack of compaction
    - ii. improper lot grading
    - iii. overall lack of water management.
  - c. The sinkhole was growing in size as more surface water was allowed to flow into the area.
  - d. Ponding water has led to washing out the fines of the backfilled material and thus created spaces within the sand. Undisturbed soils on the edge of the excavation have now moved into the excavated area and have caused settlement of the foundation and cracking of the foundation wall.
  - e. Due to the movement of soils, the gas meter of the client's home has pulled away from the exterior of the home.
  - f. That unmanaged water from the Complainant's lot and the lack of compaction of the excavated area has created the Client's problems.

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- Realizing he was now being sued, the Complainant retained [Company C] a second time on December 14, 2015, this time to conduct a geotechnical investigation of the soils located in his front yard.
  - a. A test hole was drilled to 7.6 metres and soil samples were obtained.
  - b. One soil sample taken at a depth of 2.3 metres was taken for lab testing.
  - c. Silty clay was encountered below the topsoil and extended to 3.7 metres below the ground surface.
  - d. [Company C] also installed a standpipe to monitor the groundwater level at the site. The level was found to be dry to a depth of 5.2 metres.
- 11. [Company C]'s investigation concluded:
  - The settlement of the excavation was not a sinkhole and should not cause any adverse effects to the footings of the Plaintiff's (Client's) house.
  - b. Based on the soils found, there would be no loss of soils by groundwater movement in the upper 3.4 metres of the soil and this would not cause the settlement of the Plaintiff's (Client's) house.
  - c. The excavation was not deep enough or close enough to the Client's home to be in the zone of influence for bearing pressure under the foundations of the Client's home.
- On December 9, 2015, the Complainant also retained [Company D] who reviewed the settlement that had occurred in the front yard of the Complainant's home. They concluded:
  - The settlement that has occurred at the location of the sewer repair or sinkhole has had no effect on the settlement of the neighbour's porch nor on the cracks observed in their foundation walls.
- 13. On May 11, 2016, a written decision regarding the Civil Claim was signed by the Provincial judge, ruling in favour of the Complainant and awarding costs.
- 14. On May 30, 2016, the Complainant submitted the Complaint to APEGA.

15. The Complaint was referred to the Investigative Committee, and a Panel was appointed to investigate the Complaint.

# Panel Findings

- 16. The Panel conducted an investigation, and issued its report on May 17, 2017. The Panel concluded that there was sufficient evidence to refer the following two matters to hearing:
  - a. The Member issued two reports as a professional engineer, providing professional opinions that were to be relied upon by the public; however, these reports were not based on sound engineering principles, specifically:
    - i. There were no soils tests conducted.
    - ii. The erroneous reference to the soils being silty sand.
    - iii. No groundwater tests were completed.
    - iv. A lack of reference to the zone of influence and the probability of the excavation affecting the neighbour's home.
    - v. Information known to the Member only by the word of his Client was presented in the report as factual information, apparently confirmed by the Member.

# C. CONDUCT

- 17. The Member freely and voluntarily admits that:
  - a. The report dated June 8, 2015, did not adequately contain engineering work to justify and support its conclusions and recommendations.
  - b. The report completed on August 24, 2015, did not adequately contain engineering work to justify and support its conclusions and recommendations.
  - c. The Member acknowledges that the conduct described above constitutes unprofessional conduct as defined in 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;

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- **(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 lack of skill or judgment in the practice of the profession, or;
- (e) displays a lack of knowledge of 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 dishonourable, constitutes either unskilled practice of the profession or unprofessional conduct, whichever the Discipline Committee or the Appeal Board finds.

d. The Member also acknowledges that the conduct described above contravenes Section 44(1)(b) Rule of Conduct #3 of the *Code of Ethics:*

**3** *Professional engineers and geoscientists shall conduct themselves with integrity, honesty, fairness and objectivity in their professional activities.* 

#### D. RECOMMENDED ORDERS

18. On the recommendation of the Investigative Committee, and by agreement of Michael Staple,

P.Eng., and following a discussion and review with the Discipline Committee's Case manager, the Discipline Committee hereby orders that:

- 1. Michael Staple shall receive a letter of reprimand to appear in the Member's APEGA file;
- Michael Staple is to write a letter of apology to the Complainant within 30 days of being informed that the Recommended Discipline Order has been approved;
- Michael Staple shall pay a fine in the amount of \$2,500 within 30 days of being informed that the Recommended Discipline Order has been approved;
- If orders are not completed within the 30 days, the Member and the Permit Holding company will be suspended from practice until completion of such orders;
- 5. The details of this matter will be published on APEGA's website and/or in *The PEG* magazine with names.

#### Signed,

MICHAEL STAPLE, P.ENG.

**KEVIN WILLIS,** *P.ENG.* Panel Chair, APEGA Investigative Committee

**DEAN MULLIN,** *P.ENG.* Case Manager, APEGA Discipline Committee

Date: November 16, 2017