# ENGINEERS GEOSCIENTISTS MANITOBA

IN THE MATTER OF: Jessica A. Manness, P. Eng., a registered member of Engineers Geoscientists Manitoba

AND IN THE MATTER OF: The Engineering and Geoscientific Professions Act, C.C.S.M., c. E120

# **REASONS FOR DECISION**

ENGINEERS GEOSCIENTISTS MANITOBA 870 Pembina Highway Winnipeg, MB R3M 2M7 Phone No. 204-474-2736

## ENGINEERS GEOSCIENTISTS MANITOBA

Panel of the Discipline Committee:

R. O'Toole, P. Eng. (Chair) R. Hoemsen, FEC, P. Eng. J. Peters, MAA (Lay Member)

IN THE MATTER OF:	Jessic	a A. Manness,	<b>P.</b> 1	Eng.,	a registered	member	of	Enginee	rs
	Geoscientists Manitoba								
AND IN THE MATTER OF:	The	Engineering	an	ıd	Geoscientific	Profe	ssio	ns Ac	et,

C.C.S.M. c. E120

Legal Counsel for the Investigation Committee:

Brent C. Ross Jennifer Sokal

Legal Counsel for the Member:

Robert L. Tapper, K.C.

Legal Counsel for This Panel of the Discipline Committee:

Kathleen McCandless

Hearing Dates: October 28, 2021 and December 5, 2022

## **REASONS FOR DECISION**

## The Charge:

The Charge dated May 3, 2021 ("Charge"), alleges that Ms. Manness committed professional misconduct or unskilled practice of professional engineering, contrary to s. 46(1)(a)(c)(d) and (e) of *The Engineering and Geoscientific Professions Act*, C.C.S.M. c. E120 (the "Act") and Canon 2 of the

EGM *Code of Ethics* (adopted October 18, 2018) (the "Code"), in connection with the shoring plan (the "Shoring Plan") in support of a building permit for the excavation of a condominium development at 123 Scott Street, in Winnipeg, Manitoba (the "Development"), the particulars of which are that:

- On or about January 28, 2019, February 7, 2019, February 12, 2019, and February 19, 2019, Ms. Manness sealed and submitted several versions of the Shoring Plan (collectively, the "Unapproved Plans") to the City of Winnipeg in support of a building permit for the Development;
- On or about February 27, 2019, Ms. Manness sealed and submitted a further version of the Shoring Plan to the City of Winnipeg, which design was approved for permit.
- 3. The Unapproved Plans were deficient and inadequate, and would have posed a serious risk of failure and risk to the public had they been approved, in that they:
  - a. lacked adequate information and detail, including soil parameter detail and procedural information relating to the installation of structural components;
  - b. assumed generic instead of site-specific soil properties;
  - c. displayed uneconomical, impracticable and/or non-feasible design elements;
  - d. contained calculation errors;
  - e. used Working Stress Design instead of Limit States Design as required by Canadian standards; and
  - f. contained unlikely, incorrect and/or unsupported assumptions, with potential for serious consequences;
- 4. By submitting the series of Unapproved Plans to the City of Winnipeg, Ms. Manness demonstrated professional misconduct and unskilled practice of professional engineering, contrary to s. 46(1)(a)(c)(d) and (e) of the Act, Canon 2 of the Code and the public interest by:

- a. displaying a lack of knowledge, skill, judgment and understanding of design principles in both structural and geotechnical engineering and of shoring installation techniques, contrary to s. 46(1)(a)(c) and (e) of the Act;
- b. undertaking an engineering assignment which fell outside of her area of professional competence, contrary to s. 46(1)(a)(c)(d) and (e) of the Act and Canon 2 of the Code;
- c. placing undue reliance on the City of Winnipeg upon submission of the Unapproved Plans in order to ensure that her designs were adequate and to identify deficiencies in the design work, contrary to s. 46(1)(a)(c) and (e); and
- d. failing to practice in a careful and diligent manner and in compliance with applicable legislation, contrary to s. 46(1)(a)(c)(d) and (e) of the Act and Canon 2 of the Code.

The Charge was referred to the Discipline Committee on or about August 19, 2021. On or about September 27, 2021, through counsel, Ms. Manness was served with the Charge and Notice of Hearing.

### Admissions by Ms. Manness:

At the initial commencement hearing on October 28, 2021, counsel for the Investigation Committee ("IC") satisfied the Discipline Panel (the "Panel") that the Panel has jurisdiction to hear this matter, and that all procedural steps required by the Act and the EGM By-Laws regarding the commencement of hearings and notice thereof were fulfilled.

At the commencement hearing, through counsel, Ms. Manness pled not guilty to the Charge and the matter was adjourned.

The hearing of this matter was continued on December 5, 2022. At that time, an agreed statement of facts ("Agreed Statement") in support of a joint submission on penalty, executed by counsel for the IC

and counsel for Ms. Manness, dated November 28, 2022, was entered as an exhibit. In summary, the Agreed Statement provides that:

- 1. Ms. Manness was first registered as a member of EGM on November 28, 2007. She has practiced without interruption in Manitoba since then.
- 2. Ms. Manness's discipline history with EGM consists of a caution in June 2019, which she received in connection with engineering services for the installation of water and sewer services. She has no further discipline history.
- On or about January 28, 2019, February 7, 2019, February 12, 2019, and February 19, 2019, Ms. Manness sealed and submitted the Unapproved Plans to the City of Winnipeg in support of a building permit for the excavation of the Development.
- 4. On or about February 27, 2019, Ms. Manness sealed and submitted a further version of the shoring plan to the City of Winnipeg, which was approved for permit.
- On or about June 24, 2019, Mr. Richard Derkson, a Commercial Plan Examination Administrator with the City of Winnipeg, submitted a complaint to EGM with respect to the Unapproved Plans.

As further set out in the Agreed Statement, following receipt of the complaint, a subcommittee of the IC was struck to investigate the complaint. The Registrar of EGM provided the complaint to Ms. Manness by letter dated July 8, 2019. Ms. Manness provided a response to the complaint by letter to the Registrar dated July 15, 2019, in which she admitted there was a calculation error in the shoring design and a problem with the materials proposed. An EGM investigator then provided Ms. Manness's response to Mr. Derkson for his response. Along with his response, which he provided by email dated July 24, 2019, Mr. Derkson provided email correspondence between himself and Ms. Manness, dated July 15, 2022, in which Ms. Manness expressed concerns about her abilities.

In the course of the investigation, the EGM investigator requested examples from Ms. Manness of projects where she had conducted geotechnical and structural designs, along with explanations as to the skillful application of theory, among other things, so that the subcommittee could assess her competence in geotechnical and structural engineering.

By letter dated November 14, 2019, the EGM investigator requested that an independent engineer, David Woodall of Woodall Structural Engineering Ltd., review the Unapproved Plans and the plan ultimately approved by the City of Winnipeg, and provide an opinion on whether the design work demonstrated a lack of knowledge, skill, or judgment taking into account the minimum level of knowledge, skill, or judgment to be reasonably expected of a professional engineer practicing in the field of shoring design for construction excavations. Mr. Woodall his report to EGM, dated February 18, 2020 (the "Woodall Report").

The Woodall Report identified many errors in the shoring plans and analyses, and provided the opinion that Ms. Manness is not competent or experienced in the design of shoring systems.

In particular, and as noted by the IC subcommittee, the Woodall Report found that it was clear from the details of the shoring design that Ms. Manness was not trained, experienced or competent in the design of shoring systems of the type required and that she should have declined the assignment. Other findings in the Woodall Report included, among others, that:

- o Ms. Manness's shoring plans lacked adequate information and procedural information;
- Site specific soil properties were not listed on the sealed designs;
- There was a factor of 1000 calculation error in the February 7, 2019 model;
- Ms. Manness used Working Stress Design instead of Limit States Design as required by Canadian Standards, with section properties and allowable stresses taken from a nonaccredited "Engineering ToolBox" website instead of referencing Canadian Standards;

- The design assumed generic instead of site-specific soil properties, which could have a significant effect on pressure coefficients;
- The analysis assumed continuous passive resistance below the base of the excavation rather than the width of the timbers or steel piles, an error with the potential for failure; and
- The design assumed a high water table, unsupported by analysis, and also considered effects of frost penetration unsupported by theory or analysis.

The Woodall Report concluded that:

Structural design using section properties and allowable stresses derived from obscure web site publications rather than Canadian Standards is a very dangerous practice, not one expected from a Professional Engineer. Such conduct by definition not only diminishes "the honour and dignity of the profession" but could lead to an outcome which endangers the public.

Following the receipt of the Woodall Report and the information obtained in the investigation, the subcommittee concluded that there were reasonable and probable grounds that Ms. Manness was guilty of professional misconduct or unskilled practice in relation to her work on the Unapproved Plans, and that there were reasonable and probable grounds that Ms. Manness violated Canon 2 of the Code by undertaking an engineering assignment that fell outside her field of competence.

The IC issued the Charge on May 3, 2021.

In the agreed statement, Ms. Manness admitted that she is guilty of professional misconduct and unskilled practice of engineering contrary to s. 46(1)(a)(c)(d) and (e) of the Act as well as a breach of Canon 2 of the Code, as specifically set out in the Charge.

In the Agreed Statement, the IC and Ms. Manness, through counsel, agreed jointly to a disposition on penalty in relation to the findings of professional misconduct and unskilled practice of engineering. The joint submission on penalty is that:

- a. Ms. Manness be reprimanded;
- b. Ms. Manness be restricted from the practice of structural engineering until such time as she satisfies the IC of her competency in the practice of structural engineering pursuant to the following process:
  - A structural engineer, as identified and retained by Ms. Manness (the "Structural Assessor"), will be appointed to engage in an assessment process over a period of approximately 6 months, or such longer period as the Structural Assessor may reasonably require to complete this process (the "Structural Assessment Period");
  - ii. The Structural Assessor retained will:
    - a) be a professional engineer duly registered under the Act and in good standing;
    - b) not currently be under investigation by the IC or before the EGM Discipline Committee; and
    - c) have demonstrated competence in the area of structural engineering;
  - iii. During the Structural Assessment Period, the Structural Assessor will assessMs. Manness's competency in the practice of structural engineering in such a manner as he or she deems fit;

- iv. Thereafter, the Structural Assessor will provide a written report to the IC and Ms. Manness on the issue of Ms. Manness's competency in the practice of structural engineering for consideration by the IC;
- v. Upon receipt and review of the report, the IC will advise Ms. Manness whether the restriction on her entitlement to practice structural engineering is lifted, along with an explanation if the restriction is not so lifted; and
- vi. Ms. Manness will bear the costs of the Structural Engineer, if any;
- c. Ms. Manness be restricted from the practice of geotechnical engineering until such time as she satisfies the IC of her competency in the practice of geotechnical engineering pursuant to the following process:
  - A geotechnical engineer, as identified and retained by Ms. Manness (the "Geotechnical Assessor"), will be appointed to engage in an assessment process over a period of approximately 6 months, or such longer period as the Structural Assessor may reasonably require to complete this process (the "Geotechnical Assessment Period");
  - ii. The Geotechnical Assessor retained will:
    - a) be a professional engineer duly registered under the Act and in good standing;
    - b) not currently be under investigation by the IC or before the EGM Discipline Committee; and
    - c) have demonstrated competence in the area of geotechnical engineering;

- iii. During the Geotechnical Assessment Period, the Geotechnical Assessor will assess Ms. Manness's competency in the practice of geotechnical engineering in such a manner as he or she deems fit;
- iv. Thereafter, the Geotechnical Assessor will provide a written report to the IC and Ms. Manness on the issue of Ms. Manness's competency in the practice of geotechnical engineering for consideration by the IC;
- v. Upon receipt and review of the report, the IC will advise Ms. Manness whether the restriction on her entitlement to practice geotechnical engineering is lifted, along with an explanation if the restriction is not so lifted; and
- vi. Ms. Manness will bear the costs of the Geotechnical Engineer, if any;
- d. Ms. Manness shall make a contribution to EGM's costs in the amount of \$5,000.00; and
- e. Information relating to the disposition of this matter shall be published in accordance with EGM's policy on publication.

### Submissions of Counsel for the Investigation Committee:

Counsel for the IC reviewed the Agreed Statement with the Panel, filed a Book of Legal Authorities with the Panel and spoke to the joint disposition as to penalty. Counsel for the IC stated that the findings in the Woodall Report and Ms. Manness's admissions make clear that she committed professional misconduct.

Counsel for the IC also pointed out that while this Panel is not bound to accept the joint submission, that the law makes clear that the Panel owes a joint submission a high level of deference. In that regard, he made reference to a previous decision of the Discipline Committee in *Engineers Geoscientists Manitoba v. Syed*, of August 23, 2021 ("*Syed*"). In that case, the Committee found that the question to be posed in the context of a joint submission on penalty was that laid down by the Supreme Court of Canada in *Anthony-Cook v. Her Majesty the Queen*, 2016 SCC 43 ("*Anthony-Cook*"). The Committee characterized the question as follows:

Does the joint submission on penalty before this discipline panel bring the administration of justice into disrepute or would it otherwise be contrary to the public interest? Is the joint submission so markedly out of line with the expectations of reasonable persons aware of the circumstances of the case that they would view it as a breakdown in the proper functioning of the criminal justice system?

With that in mind, Counsel for the IC noted that there must be a compelling reason for the Panel to depart from the joint submission on penalty.

#### Submissions of Counsel for Ms. Manness:

Counsel for Ms. Manness submitted that the joint submission was reasonable and that there is no reason for the Panel to depart from what has been put forward. He also noted that the proposed penalty will serve a remedial purpose and ensure that Ms. Manness is able to return to practice.

#### Analysis:

Taking into account the clear statement of the law by the Supreme Court of Canada in *Anthony-Cook*, the question before the Panel is whether the joint submission on penalty brings the administration of justice into disrepute or would otherwise be contrary to the public interest. Stated otherwise, is the joint submission so markedly out of line with the expectations of reasonable persons aware of the circumstances of the case that they would view it as a breakdown in the proper functioning of the justice system?

The Panel finds that the joint submission does not bring the administration of justice into disrepute nor would it otherwise be contrary to the public interest. Nor, for that matter, would acceptance of the joint submission be so markedly out of line with the expectations of reasonable persons aware of the circumstances of the case that they would view it as a breakdown of the proper functioning of the professional regulation system.

Accordingly, the Panel accepts the joint submission on penalty presented to it.

## **Decision:**

The Panel therefore finds that Ms. Manness committed professional misconduct or unskilled practice of professional engineering, contrary to s. 46(1)(a)(c)(d) and (e) of the Act and Canon 2 of the Code in connection with the shoring plan (the "Shoring Plan") in support of a building permit for the excavation of a condominium development at 123 Scott Street, in Winnipeg, Manitoba (the "Development"), the particulars of which are that:

 On or about January 28, 2019, February 7, 2019, February 12, 2019, and February 19, 2019, Ms. Manness sealed and submitted several versions of the Shoring Plan (collectively, the "Unapproved Plans") to the City of Winnipeg in support of a building permit for the Development;

- 2. On or about February 27, 2019, Ms. Manness sealed and submitted a further version of the Shoring Plan to the City of Winnipeg, which design was approved for permit.
- 3. The Unapproved Plans were deficient and inadequate, and would have posed a serious risk of failure and risk to the public had they been approved, in that they:
  - a. lacked adequate information and detail, including soil parameter detail and procedural information relating to the installation of structural components;
  - b. assumed generic instead of site-specific soil properties;
  - c. displayed uneconomical, impracticable and/or non-feasible design elements;
  - d. contained calculation errors;
  - e. used Working Stress Design instead of Limit States Design as required by Canadian standards; and
  - f. contained unlikely, incorrect and/or unsupported assumptions, with potential for serious consequences;
- 4. By submitting the series of Unapproved Plans to the City of Winnipeg, Ms. Manness demonstrated professional misconduct and unskilled practice of professional engineering, contrary to s. 46(1)(a)(c)(d) and (e) of the Act, Canon 2 of the Code and the public interest by:
  - a. displaying a lack of knowledge, skill, judgment and understanding of design principles in both structural and geotechnical engineering and of shoring installation techniques, contrary to s. 46(1)(a)(c) and (e) of the Act;
  - b. undertaking an engineering assignment which fell outside of her area of professional competence, contrary to s. 46(1)(a)(c)(d) and (e) of the Act and Canon 2 of the Code;

- c. placing undue reliance on the City of Winnipeg upon submission of the Unapproved
  Plans in order to ensure that her designs were adequate and to identify deficiencies in
  the design work, contrary to s. 46(1)(a)(c) and (e); and
- d. failing to practice in a careful and diligent manner and in compliance with applicable legislation, contrary to s. 46(1)(a)(c)(d) and (e) of the Act and Canon 2 of the Code.

The Panel therefore orders, pursuant to ss. 47, 48, and 50 of the Act, that:

- a. Ms. Manness be reprimanded;
- b. Ms. Manness be restricted from the practice of structural engineering until such time as she satisfies the IC of her competency in the practice of structural engineering pursuant to the following process:
  - A structural engineer, as identified and retained by Ms. Manness (the "Structural Assessor"), will be appointed to engage in an assessment process over a period of approximately 6 months, or such longer period as the Structural Assessor may reasonably require to complete this process (the "Structural Assessment Period");
  - ii. The Structural Assessor retained will:
    - a) be a professional engineer duly registered under the Act and in good standing;
    - b) not currently be under investigation by the IC or before the EGM Discipline Committee; and
    - c) have demonstrated competence in the area of structural engineering;

- iii. During the Structural Assessment Period, the Structural Assessor will assessMs. Manness's competency in the practice of structural engineering in such a manner as he or she deems fit;
- iv. Thereafter, the Structural Assessor will provide a written report to the IC and Ms. Manness on the issue of Ms. Manness's competency in the practice of structural engineering for consideration by the IC;
- v. Upon receipt and review of the report, the IC will advise Ms. Manness whether the restriction on her entitlement to practice structural engineering is lifted, along with an explanation if the restriction is not so lifted; and
- vi. Ms. Manness will bear the costs of the Structural Engineer, if any;
- c. Ms. Manness be restricted from the practice of geotechnical engineering until such time as she satisfies the IC of her competency in the practice of geotechnical engineering pursuant to the following process:
  - A geotechnical engineer, as identified and retained by Ms. Manness (the "Geotechnical Assessor"), will be appointed to engage in an assessment process over a period of approximately 6 months, or such longer period as the Structural Assessor may reasonably require to complete this process (the "Geotechnical Assessment Period");
  - ii. The Geotechnical Assessor retained will:
    - a) be a professional engineer duly registered under the Act and in good standing;

- b) not currently be under investigation by the IC or before the EGM Discipline Committee; and
- c) have demonstrated competence in the area of geotechnical engineering;
- iii. During the Geotechnical Assessment Period, the Geotechnical Assessor will assess Ms. Manness's competency in the practice of geotechnical engineering in such a manner as he or she deems fit;
- iv. Thereafter, the Geotechnical Assessor will provide a written report to the IC and Ms. Manness on the issue of Ms. Manness's competency in the practice of geotechnical engineering for consideration by the IC;
- v. Upon receipt and review of the report, the IC will advise Ms. Manness whether the restriction on her entitlement to practice geotechnical engineering is lifted, along with an explanation if the restriction is not so lifted; and
- vi. Ms. Manness will bear the costs of the Geotechnical Engineer, if any;
- d. Ms. Manness shall make a contribution to EGM's costs in the amount of \$5,000.00; and
- e. Information relating to the disposition of this matter shall be published in accordance with EGM's policy on publication.

Dated in Winnipeg, Manitoba this 23 day of December, 2022.

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Jerald Peters, MAA, Lay Member

Ray Hoemsen, P. Eng. Digitally signed by Ray Hoemsen, P. Date: 2022.12.23 08:53:20 -06'00'

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