

## TECHNICAL MEMORANDUM

Date: **3 APRIL 2023**

To: **BOARD OF DIRECTORS**

cc: **R. ANDERSON, E.D. & PRESIDENT**

From: **TECHNICAL EXECUTIVE COUNCIL & STAFF**

Subject: **CPESC FIELD INSPECTION AUTHORITY**

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### SUMMARY OF FINDINGS

Over the years, several issues have arisen over how much inspection authority a CPESC has in regard to a plan and/or design. Last year the issue was addressed by ECI with a series of detailed evaluations<sup>1</sup>. While CESSWI duties are focused on observations and reporting, the designer's authority to inspect is less clear based on the Scope of Practice. The industry has greatly evolved and the focus of the CPESC has been on the growing specialized knowledge that is required to address the complex regulatory arena that continues to evolve.

#### 1.0. EVALUATION

Over the past year, ECI established several steering committees (including input from the Technical Advisory Council<sup>2</sup> and the CPESC Certification Committee<sup>3</sup>) and

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<sup>1</sup> Three Surveys sent to all CPESC's, CPESC CC, TAC, TEC, and Staff Meetings

<sup>2</sup> Ibid

<sup>3</sup> Ibid

sent out three (3) surveys<sup>4</sup> to solicit public comments on the subject to better understand the implications.

The majority of professionals believed a CPESC should be qualified to perform field observations/inspections (over 90 percent), but by in large qualified their opinion as to whether it was implicit in the CPESC program (about 50 percent). The vast majority also stated that CPESC and civil engineers should also have field inspection/observation training as essential knowledge and skills (over 95 percent). These statements were qualified with concerns that they had too many encounters with individuals that clearly did not have the necessary education and training in the field (over 85 percent).

ECI staff and various committees have opined that the practice of Erosion and Sediment Control (E&SC) requires in the field (or field related) training. Surveys and screening over the past 8 years continue to show that education development or effective CEU/PDH's within the E&SC field are limited<sup>5</sup>. Therefore, most professionals rely on job training and mentoring.

## FINDINGS

ECI has determined the high demand and technical nature of the E&SC and related fields require ever increasing knowledge of these highly specialized professionals. Whereas certain licensed professional (such as civil engineers) has a required 4-year national standardized curriculum, national in-training exams, and a

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<sup>4</sup> Ibid

<sup>5</sup> Exam evaluations of 32 CPESC candidates with graduate degrees scores consistently lower statistically than two control group of random CPESC candidate with equivalent education and professional experience.

standardized national 8 hours exam, the CPESC requires 7 years of education and experience, with a heavy reliance on professional experience and mentoring<sup>6</sup>.

The stormwater professional is still largely in its infancy in terms of standards. A thorough and rigorous education and training program has still not been established at the University level for erosion and sediment control. Therefore, the standards are based on a combination of education and on job training. The design aspects of erosion and sediment control, as well as stormwater quality and management are demanding and not a skillset that can be mastered with the necessary competency with only a few years of experience. The 7 years required by CPESC is an absolute minimum and ECI has observed that 10 to 15 years of experience may be necessary.

For many professionals, the education and training are coupled with field experience, but the surveys and committees found that by in large not all professionals were provided the necessary field training, as their focus was on design aspects. Given the complexity of the E&SC and Stormwater Management, this is understandable, as the permits increase regulations for compliance.

## **SUMMARY**

The Council, Committees and Staff recommend that ECI require all CPESC's to hold a CESSWI or CPSWI certification to perform field inspection related activities.

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<sup>6</sup> Ibid