



## **Supplemental Report on Davisville JPS and Spectrum Alternative Senior School Geotechnical Investigation**

**To:** Finance, Budget and Enrolment Committee

**Date:** 13 May, 2020

**Report No.:** FBEC: 05-20-3883

### **Strategic Directions**

- Allocate Human and Financial Resources Strategically to Support Student Needs

### **Recommendation**

It is recommended that the supplemental report on Extraordinary Costs for Davisville Junior Public School be received.

### **Context**

The purpose of this report is to provide the Board with additional information regarding the significant additional construction cost claim for below grade site preparation, excavation and material removal work - part of the Davisville Junior Public School and Spectrum Alternative Senior School replacement project and considered as an “Extraordinary Cost Item” for the Ministry of Education (EDU).

The work that was completed was in addition to the scope originally outlined in the construction tender documents and was based on investigations conducted by HLV2K, the Geotechnical consultant retained by the TDSB. A summary of work conducted on site, along with an assessment of the current situation, has been prepared by HLV2K and is attached to this report as Appendix ‘A’. The assessment analyzes and describes events leading to the current need for the additional construction cost claim as a result of the current findings in comparison to the original Geotechnical reports.

Geotechnical reports are surveys and investigations of the below-grade conditions of a site prepared in advance of design work for a new building. These investigations are based primarily on boreholes and core samples intended to identify the nature of the material underground, the location of the water table, and the presence of possible

anomalies and contaminants. This is intended to provide the architect and engineers with necessary information to design foundations and civil works. The Geotechnical reports are also part of the construction tender documents to allow assessment of excavation and material disposal costs. Accuracy of the geotechnical investigations are limited to the number of boreholes initiated.

At the Davisville JPS project site a Phase I ESA (Appendix 'B') was performed at the request of Toronto Lands Corporation (TLC) and the report recommended a Phase II ESA. The Phase II ESA (Appendix 'C') involved the installation of thirteen (13) boreholes, eight (8) of which were used as monitoring wells. The impacted soils were encountered for de-icing salts and at one location for Petroleum Hydrocarbons (PHC) near the former boiler room. The ground water showed only impacts for de-icing salts. A geotechnical investigation was conducted at the request of TDSB and with the installation of Twenty-two (22) boreholes ranging in depth from 8 to 15 meters below ground surface. They determined that the soil consisted of silty sand to silty clay which restricts the flow of groundwater and contaminants through it. The small area of influence was minimal. Drawing down the groundwater table in these soils has a small area of influence meaning that any type of spill (surface or subsurface) would not be detected until excavated. At the request of the architects a ground penetrating radar (GPR) investigation was undertaken and the analysis showed that there was some former foundation left from previous structures. Volumes were estimated based on this work.

It should also be noted that the claim for additional funds is based on the need to compensate for the shortfall in bench mark funding. The base provincial allowances are based on an assumption of a green-field site with no environmental contaminants or ground water issues with suitable material and bearing capacity for a new school building. Should a project encounter issues that were not anticipated during the original cost estimates, the EDU has an application process for extraordinary costs. The EDU does not provide funding until such time as the additional costs are quantified and incurred: actual costs are submitted by the general contractor. In terms of the Davisville JPS replacement school project, the identified costs are being presented to the EDU as part of the "Approval to Proceed Amended Report" to request for additional "Extraordinary Cost Items" as per the EDU submission process.

## **Action Plan and Associated Timeline**

The project received TDSB Board Approval for additional extraordinary costs in April 20, 2020 (FBEC report, 04-20-3872, 20 January, 2020).

## **Resource Implications**

Not applicable.

## **Communications Considerations**

Community Engagement – communication with all community stakeholders is maintained throughout the process. The school and school community will continue to be informed regarding the construction timeline and site utilization.

## **Board Policy and Procedure Reference(s)**

Not applicable.

## **Appendices**

- Appendix A: Sequence of Events for Assessment of the Property and Potential Costs
- Appendix B: Phase I – EV-1046-27482-TLC-Phase I ESA-43 Millwood Road
- Appendix C: Phase II – EV-1046-27692-TLC-Limited Phase II ESA-43 Millwood Road
- Appendix D: Typical Scope of Work Geotechnical & Environmental

## **From**

Steve Shaw, Executive Officer, Facility and Planning at  
Steve.Shaw@tdsb.on.ca or at 416-395-4566

Terry Leventos, Senior Manager, Capital Project Management at  
Terry.Leventos@tdsb.on.ca or at 416-395-4566

Salvatore Beltrano, Manager, Capital Project Management at  
Salvatore.Beltrano@tdsb.on.ca or at 416-395-4566