



Memo

TO: Chair, Finance and Administration Committee

SUBJECT: Municipal Hall Upgrades

DATE: November 6, 2020

FROM: Chief Administrative Officer

UPDATE

The updated Geotechnical Report for the Hall has been completed. The information that is relevant to Council is the following:

5. GEOTECHNICAL COMMENTS AND RECOMMENDATIONS

5.1 GENERAL

The following comments and parameters are based on the information that was available to WSP at the time of writing this report. These recommendations are preliminary and only suitable to assist the client in developing cost comparison to assist in deciding on whether to proceed and if so the preferred method of developing the site. Whichever option is selected by the client will still require further analysis and interaction with the structural engineer to progress the detailed design.

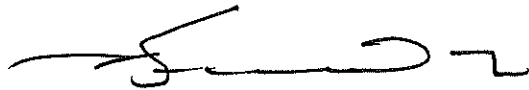
5.2 GROUND IMPROVEMENT

Our preliminary analysis indicated that removing the upper soils and replacing with geogrid reinforced engineered fills could improve the stability of the site to within tolerable levels provided the following recommendations are followed. We note that the ground model was developed using the worst-case ground conditions and this model can be refined during detailed design to economise the design and potentially reduce the demand on the structure. By limiting the depth of ground reinforcement to 2m bgl, this should avoid the need to excavate below groundwater which would make construction simpler.

For ground improvement, we recommend the following:

- Remove the upper 2m of soil and replace with well graded 75 mm minus engineered fill, placed, and compacted to at least 95% modified Proctor maximum dry density.*
- Geogrid reinforcement shall comprise:
 - o Miragrid 8XT (or equivalent);**

While it appeared at first blush that the project would be completed in 9 months, reality has set in. Please note projected timelines are now shown in the attachment.



Joseph A. Fernandez

Lake Cowichan Municipal Hall - Renovation Project
 Project Timeline

06-Nov-20

