

April 24, 2023

Project B2302897

Mr. Ryan Thilges
Blue Earth County
35 Map Drive
Mankato, MN 56001
ryan.thilges@blueearthcountymn.gov

Re: Geotechnical Memo
Blue Earth County Public Works Facility
County State Aid Highway 90 and Stoltzman Road
Mankato, Minnesota

Dear Mr. Thilges:

This letter serves as a brief summary of our geotechnical investigation for Blue Earth County Public Works Facility County proposed a County State Aid Highway 90 and Stoltzman Road in Mankato, Minnesota.

Background

We recently completed geotechnical soil borings for the proposed facility. A total of 24 standard penetration test borings were completed for the project to depths of 10 to 25 feet.

The borings initially encountered 1 to 2 feet of topsoil underlain by glacial soils consisting primarily of lean clay with varying sand contents that were brown to gray and moist. Penetration test values in the upper portion of the borings indicate the soils are soft to medium in consistency and medium to stiff at depth.

Groundwater was encountered in some borings during drilling at depths of 10 to 15 feet. Two borings were left open overnight and groundwater was measured at depths of 4 to 5 feet. Based on the soils encountered, we anticipated that perched groundwater will likely be encountered at the site at relatively shallow depths.

Conclusions

Based on the results of the borings, we anticipate that the site will be suitable for support of the proposed facility utilizing conventional construction. Some improvement of soft and wet soils will be required below the proposed structure by means of removal and replacement or ground improvement. Based on the soils encountered, we anticipate that incorporation of a sand subbase below pavements or some form of stabilization will be required.

A full geotechnical evaluation report is being prepared for this project. We recommend referring to that report once it is issued for full design and construction recommendations.

Remarks

In performing its services, Braun Intertec used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession currently practicing in the same locality. No warranty, express or implied, is made.

If you have any questions about this memo, please contact Philip Bailey at 507.995.2788 or pbailey@braunintertec.com.

Sincerely,

BRAUN INTERTEC CORPORATION

Professional Certification:

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.



Philip E. Bailey, PE
Business Unit Leader, Senior Engineer
License Number: 47539
April 24, 2023



Ray A. Huber, PE
Vice President, Principal Engineer