

ASCE/AGC Meeting Summary

Week 9: WJE Engineers

March 8th, 2024

This meeting recap is intended to allow all ASCE/AGC members to stay up to date with the events that take place during our weekly meetings!

Announcements:

- 1. Join us next Friday, 3/15, from 12–1 p.m. in Marquez Hall 226 to hear from Mortenson Construction.
- 2. PLEASE PAY YOUR DUES: \$10 a Semester
 - a. First Semester Members' Dues Waived
- 3. Bowling Networking/Social Hour on 3/28 from 6-8 p.m.
 - a. Sign up if interested: <u>https://forms.gle/znSYPckvNcMtHjne9</u>
- 4. Follow us on Instagram: @asce.mines



Civil Engineering Fun Fact of the Week:

Did you know that the Leaning Tower of Pisa is actually not the world's most (unintentionally) leaning tower? The record belongs to the Leaning Tower of Gau-Weinheim in southwest Germany. While the Leaning Tower of Pisa has a current tilt of 3.97 degrees, the Gau-Weinheim Tower has a lean of 5.43 degrees.



Today's Presenters: WJE Engineers

This week's presentation featured Don Carroll and Tracy Perry from WJE Engineers. They discussed the history of the Pike's Peak Summit House and dealing with permafrost under concrete foundations. Below are some notes about what was shared:

- The issue with concrete slabs is that when they cure they produce heat which is unable to come into contact with the ground due to permafrost.
- The cheapest option is a raft foundation which is a concrete slab that sits on top of steel beams that were partialy buried.
- However, the issue with raft foundations is that they can shift over time, which resulted in the need to install adjustable jacks under the foundation.
- Between 1964 and 1986, the slab had moved 8.5 inches, and there were several voids between the ground and the foundation.

Thank you to our presenters, Don Carroll and Tracy Perry from WJE Engineers! If you have any questions, you can contact them via email at <u>dcarroll@wje.com</u> and <u>tperry@wje.com</u>.

Respectfully,

Andrew J. Hurter IV, ASCE-AGC Secretary, Spring 2024

Have any questions? Feel free to email Andrew Hurter at <u>andrewhurter@mines.edu</u>.