Breitung Township
Regular Board Meeting 10-16-2026, 9:00 AM
In Person Meeting at the Timothy Tomsich Community Center
33 First Avenue, Soudan MN 55782

Present In Person:
Board Members: Chairman Matthew Tuchel, Supervisor Erin Peitso, Supervisor Stephen Tekautz, Clerk Amber Zak, Treasurer Teresa Dolinar
Public: Dave Bystrom, Daniel Wiirre, Scarlet Stone (Timberjay Newspaper), Zach Lucas (VEIT & Company, Inc.), William Pellico (Fermilab), Tom Gorsmas (Maint. Sup.)

Call to Order at 9:00 AM by Chairman Tuchel

Acceptance of Agenda
Motion by Supervisor Tekautz to accept the agenda with the exception of the time stamp of 6:00 PM being changed to 9:00 AM
2nd by Supervisor Peitso
Motion Passed 3-0

New Business:
Use of McKinley Park Campground Property by Fermilab's contractor, VEIT & Company, Inc. for placing a planned Neutrino Detector in Lake Vermilion, Minnesota
Chairman Tuchel began by summarizing a special meeting, noting that this was the only item on the agenda and the only one that would be able to be discussed at this meeting. Chairman Tuchel invited Zach Lucas to speak regarding the planned project.

Mr. Lucas explained the following:
VEIT & Company would be installing the system and placing it in the lake, the system would be marked off by buoys around 10 detectors on the North side of Ely Island at a space approximately 10 feet wide by 100 Meters Longs; it would be installed roughly 300 feet off shoreline. Phase 1 would be starting October 20, 2026 with work through November of 2026 and would include building a barge and crane at McKinley Park Campground; for this, the boat launch and beach would be used with expected operating hours of 7 AM – 7 PM. The detectors would be loaded onto the barge using a crane with weights coming in at approximately 48K pounds. Once the detectors were loaded and installed into the lake, the barge and crane would be demobilized and the beach would be restored with grading/re-seeding-sodding. The experiment would be performed over the winter utilizing a monitoring system that would be housed inside of a hut on Ely Island (property owner approved).

Phase 2 of the project would begin in October of 2027 and would include the re-building of the barge and crane systems; the detectors would be removed from the lake and hauled to McKinley Park Campground to be loaded onto trucks. Once the detectors were out, the barge and cranes would be demobilized, and beach repair would once again be completed.

Questions from board members and audience members regarding the size and depth were addressed: the detectors would be located in approximately 35 feet of water, tethered to blocks with approximately 3 feet of cable. The MUMs (Muon Underwater Monitors) are approximately 10 feet high, which would leave an approximate clearance of 15 – 20 feet.

Mr. Pellico spoke next regarding the project specifically:
Fermilab is conducting the experiment and it must be done in a timely manner, as the beam that shoots the neutrinos from Chicago is being shut off in February, after being in commission since the mid-eighties. Fermilab is able to detect and separate neutrino events (beamed and naturally occurring cosmic neutrinos), but this would be the first time doing a water detection, the experiments are normally done in mines. The need for 10 detectors is a fail-safe for any that might have issues such as leaks, breaks, etc. The overall size of the detectors is 25 ft x 10 ft x 10ft and they would be interested in leaving one with the Soudan Mine so that students could study it; he noted that they were also interested in holding STEM/Physics events with local high school as the experiment was being conducted and that local schools could come to see the installation as it was happening.

Questions from board members and audience members regarding the experiment were addressed: The end result is to see how well the detectors work in water and whether a detector like this, that can be cheaply made, will work; if so, it will open up a lot of experiments for the future. An example of potential use would be utilizing them to detect structure of pyramids in Egypt. The detectors would not cause noise; the neutrinos were being deployed by a gun/device in Chicago which had been pointed in this direction since the early-2000's. Fermilab is able to detect difference between caused events and natural events by the timing of the event.

Mr. Lucas spoke again on Veit & Company's proposal:
The intention with the work is to minimize damage and repair in the spring and the ultimate goal is to not use the boat launch in order to avoid damaging it; the crane pad would be set adjacent to the launch. Veit & Company would provide asphalt/bituminous repair (reclaim, recycle, repave) at a depth of 4 inches and the intention would be work with local contractors. He measured the area for repaving at 2500 square yards. Maint. Sup. Gorsma noted that some of the water lines, which are plastic, run under the pavement; Mr. Lucas indicated that mats could be put down to minimize the damage and that if there was damage, it would be repaired. The approximate value given to Mr. Lucas by one out-of-area contractor was $137k.

Chairman Tuchel noted items to consider:
The blacktop will be worse for use for the entire 2027 summer, there could be potential utility issues, incoming funds could be beneficial as a match for the future ADA project at McKinly Park Campground which involves the parking lot. He questioned Mr. Lucas on whether the township could ask for the value of the repair to act as a potential match; Mr. Lucas affirmed that would be reasonable. When questioned if the launch was damaged during the work, would it be repaired; Mr. Lucas affirmed it would be repaired.

Audience members were included in discussion:
Tom Gormsa – the township would need further assurance for other potential damages
Dave Bystrom – noted he was both for and against because it was so close to his property

Motion by Chairman Tuchel to allow Veit & Company, Inc. to utilize McKinly Park Campground until December 4, 2026 and to return October 2, 2027 through December 1, 2027 to conduct work related to the neutrino detection experiment. In turn, Veit must agree to provide 2500 square yards of asphalt at a 4-inch depth with the option of the value of asphalt replacement as cash payment at the township's discretion in Spring of 2028. Veit must further agree to restore beach and landscaping areas adjacent to boat launch and docks prior to campground opening 2027 as well as repair any incidental damage due to the project included but not limited to boat launch and utilities. Veit must further agree to restore parking lot to functioning status for the use of the 2027 camping season.

2nd by Supervisor Tekautz
Motion passed 3-0

Next Board Meetings
Regular Board Meeting: Tuesday, October 20, 2026, at 6:00 PM

Adjourn
Motion by Supervisor Peitso to adjourn the meeting at 9:55 AM
2nd by Chairman Tuchel
Motion passed 3-0

Respectfully Submitted

Amber Zak
Clerk, Breitung Township