

**CASE STUDY** 

Agricultural Silo Base Reinforcement – Multi-layer Geosynthetic System



**LOCATION:** Saskatchewan, Canada

**PROJECT TYPE:** Supply Only

**▼ PRODUCT USED:** Swamp Grid™, Titan Earth Grid™

## PROBLEM:

A customer in the agriculture industry contacted Titan seeking a solution to reinforce a base pad that would support four new 10,000-bushel storage silos, also known as hopper bins used to store livestock feed and grain seed.

### THE TITAN SOLUTION:

These silos can weigh anywhere from 500,000 to 600,000 pounds when full and must sit on a well reinforced base to be stable and prevent sinking into the soil. The conventional solution for this is concrete pile reinforcement, which would have cost \$80,000. Our team collaborated with the client to design a a higher performing and more economical multi-layer geosynthetic base reinforcement solution using Swamp Grid™ geogrid composite, type 33 gravel, followed by a layer of geotextile and Titan Earth Grid™ geogrid, topped with another layer of type 33 gravel.

## ACHIEVEMENT:

The reinforced base was constructed using 8481 square feet (788 m2) of Swamp Grid™ 30 and 6361 square feet (591 m2) of Titan Earth Grid™ 24. This solution reduced the amount of aggregate needed and saved the customer a total of \$55,000 on their project.





Contact us for more information:

#### TITAN ENVIRONMENTAL CONTAINMENT

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## ACHIEVEMENT CONT'D:

## **Client Testimonial:**

"By far this was the most cost-effective solution. What I like about it is if in twenty years we decide to move these bins, we can move the bins, move the gravel, and roll up the geotextile, whereas concrete piles being 18 feet in the ground - there's no moving those!" - John Phlanzner



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