PROJECT SPOTLIGHT:
COUNTY ROAD

Unpaved Road Stabilization - NaturalPave

140%	89+	10
Improvement in Initial CBR	**CBR Value Maintained Through Freeze/Thaw Cycles**	**Different Stabilization Designs Evaluated**

CHALLENGES

- Road material was inconsistent and required frequent grading and gravel replacement to maintain.
- Traffic includes Amish buggies, farm equipment, and heavy trucks.
- Install 10 different test sections to evaluate various stabilization solutions.
- Stabilize the road to hold up throughout the winter and freeze/thaw cycles.

SOLUTION

- Placed 2.5 inches of new aggregate to improve the existing material.
- Midwest installed six different stabilizers in ten separate test sections ranging from 500-1000' long.
- Collaborated and assisted Iowa State University with data collection and on-going performance monitoring.

RESULTS

- **140% Initial Increase in Average CBR Value:** Increased the average CBR value from 39 to 94 in the first 30 days.
- **Maintained 89+ CBR Values Through Freeze/Thaw Cycles:** Average CBR values of 89+ were maintained through freeze/thaw cycles and winter.
- **All-Weather Durability:** Stabilized sections demonstrated resilience against harvest traffic and harsh winter conditions, effectively eliminating frost boils, rutting, washboarding, and material loss.
- **Cut Maintenance By 90%:** The frequent and widespread maintenance typically required on this stretch of road was decreased to minor, occasional touch-ups.

PROJECT BACKGROUND

Product: Soil Sement Engineered Formulas, Eco-Pave, Eco-Pave Plus, StablPave, Intresoil
Location: Iowa
Industry: County
Customer: Secondary Roads Department

The Secondary Roads Department face constant challenges keeping their unpaved roads in good condition. Heavy agricultural vehicles and Amish buggies contribute to rapid surface deterioration, necessitating frequent maintenance and dust control to ensure safety and usability. In response to these persistent issues, the department proactively explored new strategies and alternative solutions for road stabilization.
Partnering with Midwest and Iowa State University, ten different stabilization solutions were installed and routinely monitored for performance.

LOOKING FORWARD

The success of the test sections provides the foundation and sound engineering data for expansion to other unpaved roads within the County and similar regions. Continued monitoring and collaboration between Midwest Industrial Supply, the Secondary Roads Department, and Universities will further demonstrate the long-term performance and cost benefits of Midwest's Unpaved Road Stabilization solutions.