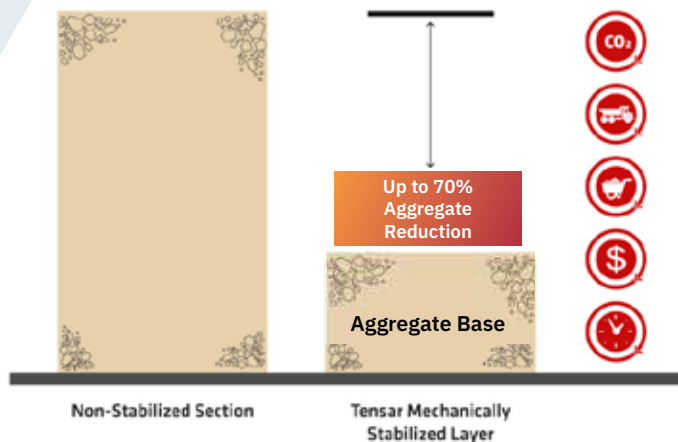


## Cost-effective, Dependable Access Roads and Working Surfaces for Transmission Line Applications

The U.S. electrical grid is the largest interconnected machine on Earth. It consists of over 450,000 miles of high-voltage transmission lines and over 5.5 million miles of local distribution lines, linking thousands of generating plants to factories, homes and businesses.

In many cases, the haul/access roads to these lines have underlying soil conditions that are unfavorable, characterized by soft clay, silt or peat with high groundwater tables.

This presents a particular challenge to the contractor when constructing access roads with heavy vehicle traffic. An even greater test occurs in areas where the transmission towers are located. The heavy lifting equipment required to position the towers exerts high pressures on the underlying soft subgrade.



### THE TENSAR® ADVANTAGE

By incorporating Tensor InterAx Geogrids, a mechanically stabilized layer is created for the haul/access roads and working areas. This results in less excavated material needed to be taken away from the site, and less aggregate needed to be imported, placed and compacted.

**LESS AGGREGATE:** Accepted design methodologies have demonstrated that the required aggregate thickness can be reduced by up to 60%. With Tensor geogrid, it's possible to design thin, yet robust access roads and crane pads that can handle heavy loads, with no loss of performance. In some instances, the sections can be reduced to 4 - 6 inches or less.

**INCREASED SPEED OF CONSTRUCTION:** The installation process for geogrids is extremely straightforward. Using less aggregate leads to quicker installation when compared to other solutions that use conventional soil stabilization techniques.

**AVOID OVER-EXCAVATION:** Traditional stabilization often involves expensive over-excavation and disposal of the uppermost subgrade soils. With Tensor geogrid, there is little to no undercut and it's possible to build these structures at grade.

**ELIMINATE UNCERTAINTIES ASSOCIATED WITH CHEMICAL STABILIZATION:** Apart from the obvious environmental concerns, chemical treatments of the subgrade like cement and lime requires that optimum temperatures and dry weather conditions be met as well as lengthy curing times. This can lead to delays in the construction process.

**LOWER COSTS:** Using less aggregate with an increased speed of construction yields significant cost savings. These cost savings increase with greater traffic loads and weaker subsoil conditions.

## HEAVILY LOADED AREAS

The locations where transmission line components are unloaded and lifted into position often present the greatest challenge to avoiding subgrade failure. In these areas, multiple layers of InterAx Geogrids can be used to strengthen the aggregate section.

The stiffened aggregate results in an enhanced load distribution beneath the large static and dynamic loads imposed by the lifting equipment. This increases the factor of safety against a bearing capacity failure in the subgrade.

## MAXIMIZE TIME AND COST SAVINGS WITH TENSAR+ SOFTWARE

Tensar+ design software incorporates the benefits of Tensar geogrids into industry-accepted design methodologies. Based on rigorous full-scale testing, it provides specification generation along with educational resources to help users make more informed decisions. You can easily compare design alternatives, automatically generate a performance spec, calculate time, cost, carbon savings, and other sustainability metrics.

Put Tensar+ to work on your next project. Access this free, cloud-based software by visiting [TensarPlus.com](https://www.TensarPlus.com)



## EXPERIENCE YOU CAN RELY ON

Tensar International, the leader in geosynthetic soil stabilization, offers a variety of solutions for paved surfaces and roadway projects. Our products and technologies, backed by the most thorough quality assurance practices, are at the forefront of the industry. Our support services include site evaluation, design consulting and site construction assistance.

For more information on InterAx or other Tensar Systems, please call 800-TENSAR-1, e-mail [info@TensarCorp.com](mailto:info@TensarCorp.com), or visit us online at [www.TensarCorp.com](http://www.TensarCorp.com).



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