Nilex is committed to working with our clients to unearth better results on their civil, environmental, and construction projects by applying the latest engineered, technically advanced materials and construction techniques in five key application areas:

- Roads
- MSE Walls & Slopes
- Erosion & Sediment Control
- Water Management
- Containment

We have built strong relationships with many different types of clients, including Resources and Power Companies, Government Agencies, Airports, Transit and Rail, Contractors and Developers.

Our experience in the geosynthetics industry and our commitment to the environment, dates back to 1977. Today, Nilex continues to provide smart, innovative solutions that lessen the environmental impact of a project, while providing an economic advantage to our clients.

Simply stated, it’s a better way of building.
Nilex’s engineered roadway systems make the construction of roads, highways and yards more economical and environmentally-friendly by significantly reducing the amount of aggregate required while increasing structural performance and life expectancy.

Our products provide reinforcement, stabilization, separation, asphalt rehabilitation, dust control and drainage that enhance the construction process for paved/unpaved structures and haul roads.

If safety is a concern, using less aggregate can produce a meaningful decrease in hours spent processing and handling as well as fewer miles on the road.

Advantages

The Nilex Roadway Advantage:

- Technical – Engineered solutions, design software, roads specialist, site support and roadway experience since 1977.
- Economical – Optimization of road section thickness results in lower aggregate processing, transportation and placement costs, as well as increased life expectancy.
- Environmental – Thickness savings provide reductions in greenhouse gas emissions associated with the mining, processing and handling of natural aggregate materials.

Quantifiable Savings

Nilex can now calculate the economic and environmental benefits of implementing our engineered geosynthetic products in any road construction design, versus conventional road construction methods, using our proprietary and validated Innovation Calculator.

Types of Projects

- Paved highways & secondary roads
- Unpaved roadways
- Parking areas for commercial & industrial facilities
- Freight distribution centers & terminals
- Heavy equipment yards at port, rail, intermodal, and industrial facilities
- Heavy haul & access roads
- Airport runways & taxiways

Technical Support

Nilex has a team of experienced Application Specialists, including professional engineers, with in-depth knowledge of their application area. They function across all Nilex regions and can provide assistance in determining the best solution for the challenges you face at any stage of a project.

By engaging Nilex at the earliest stages of your project, our experienced technical support team can assist in developing concepts to support or undertake full construction design, and provide advice and site support to assist customers in effectively installing our products and systems.
Including Nilex’s geogrid and geotextile products in roadway design improves the subgrade support – and ultimately the life span of the structure – by reducing and spreading the stress on the weak subgrade.

Often poor subgrade soils do not possess the strength to support construction activities and the subsequent intended traffic loads.

Nilex’s line of roadway reinforcement and stabilization materials maximize load distribution and increase the effective bearing capacity of the subgrade to help provide a stable foundation layer from which a permanent or temporary road/working platform can be built.

“Provides a stable foundation over challenging soils for temporary or permanent road and working platforms.”
The structural benefits of using Nilex’s geogrids in road construction include:

• Reduced lateral spreading of the base course
• Increased confinement leading to a stiffer base
• Reduced asphalt fatigue

Overall, roadways designed with geogrids can see increased load bearing capacity, a longer pavement service life and reduced section thicknesses.

Base Reinforcement & Pavement Optimization

From haul roads to major roadways, Nilex’s geogrids provide a proven solution to base reinforcement and pavement optimization.

Road structures can fail prematurely due to the lateral displacement and weakening of base course aggregate. The structural strength provided by Nilex’s geogrid products allows for the installation of thinner base course sections, reduced asphalt thickness, or the improved performance of conventionally designed structures.
Pavement cracking distress on roads, highways, parking lots and airport runways and aprons is a common problem. The intrusion of water through surface cracks and into the base structure accelerates deterioration of the roadway structure.

Resurfacing the road can improve the situation but only until cracks in the underlying layers reflect through the new surface. Nilex’s line of pavement reinforcement products can reduce maintenance costs and extend the roadway lifespan by:

- Providing reinforcement between the levelling and surface course of the pavement to resist the migration of reflective cracks.
- Preventing surface water infiltration by forming a moisture barrier and stress absorption layer, improving the pavement’s resistance to reflective and fatigue cracking.

“Extend roadway lifespan, reduce long term maintenance needs.”
Road Drainage

One critical design component of any roadway structure design is road drainage. Stormwater management is vital to ensuring the long-term success of our roadways. Proper drainage of a roadway creates a safe driving environment by minimizing pavement failure and roadside ponding and sheeting.

Nilex offers an assortment of drainage systems that complement our other roadway products and provide maximum drainage capacity with a minimum need for trenching and processed aggregate. Our solutions include edge drains, strip drains, drain tubes, and engineered synthetic subsurface drainage layers which provide rapid drainage of water entering the pavement structure, reducing long-term maintenance costs.

When used in place of conventional roadway drainage structures, such as French drains, Nilex’s prefabricated drains provide equivalent or higher drainage capacity in a fraction of the space. The streamlined design of the prefabricated drainage systems provide significant cost savings and environmental benefits in the excavation and removal of material and the transportation and placement of drain rock.

Dust Control

Nilex’s dust control products are applied to soil surfaces in order to limit the creation of fugitive dust emissions, helping to reduce work site disruptions due to severe dust conditions.

Nilex offers a dust suppressant product that is suitable to use in sensitive environmental situations. It is non-toxic and non-corrosive therefore it will not harm nearby vegetation or damage vehicles. A variety of dust suppressant products are available; however, finding the right one that fits your project’s activities can reduce the need for regular, frequent watering, resulting in significant cost savings over the long term.

Whether its mine haul roads, landfills, agricultural roads, forestry roads, rural roads, construction sites or parking lots, if you have dust control issues Nilex can help.

“Effective drainage is critical to the long-term integrity of the road structure.”

“Reduce work site disruptions and health issues due to severe dust conditions.”
Products are only part of any solution. Nilex also offers a wide range of services designed to help our customers get the most from their construction budget.

**Design/Build Support**

Nilex provides professional design and engineering support to help customers utilize our technology and increase project quality and life expectancy while reducing costs, over conventionally designed projects. Whenever materials need to be moved, removed, imported, or protected, Nilex offers innovative options to simply build better, and at lower cost.

**Distribution**

Nilex products are available at convenient regional locations across Canada and the US. We offer our customers the availability of in-stock product and speedy delivery, often required to meet changing project deadlines.

For select geogrids, Nilex offers a software that will allow the user to accurately predict the performance of geogrid reinforced and unreinforced structures for both paved and unpaved applications. The software offers two cost analysis tools to evaluate design options for paved and unpaved roads.

**Services**

In addition to project management and design assistance, Nilex offers the following in-house services to further assist our clients with their projects.

**Custom Fabrication**

Nilex’s in-house fabrication facility has the ability to convert existing geosynthetic products into custom sizes, including geomembrane seaming and geotextile sewing, to increase the width and/or roll size of the original product to meet the needs of a project. In addition, Nilex can fabricate a wide range of erosion and sediment control materials in custom sizes including silt fence, silt curtains, dewatering bags, etc.

To find out how Nilex can help you on your next construction project, visit our website at www.nilex.com or contact us at 303.766.2000.