

Product Evaluation

RE: Review of Launched Soil Nailing

PRODUCT

Launched Soil Nailing in Canada is owned by Morsky Earthworx Solutions Ltd. of Regina, Saskatchewan.

VENDOR CLAIMS AND INFORMATION

CLAIMS:

Morsky Earthworx Solutions Ltd. uses a unique and proprietary technology, to address soil stability problems on shallow slopes. Environmental regulators hail the soil nailing technology very environmentally friendly. It provides a quicker and less costly slope stability solution.

Website: www.soilnaillauncher.com.

DESCRIPTION:

Launched Soil Nailing technology uses a canon powered by compressed air to launch steel rods into a failing slope. The 6 m nails penetrate through the failure plane into the stable soils below thus secures the slope from sliding further. Various surface treatments, such as, shotcreting, can then be added to contain surface erosion.

POTENTIAL USAGE:

Launched Soil Nailing system stabilizes unstable soil slopes along highways and water courses.

STANDARDS:

United States Department of Agriculture (USDA) – Application Guide for Launched Soil Nails.

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE:

Alberta Transportation has some experience with this product and technology.

APPLICATION STANDARDS:

The slope is analyzed with limit equilibrium methods.

RECOMMENDATIONS:

Launched Soil Nailing be listed as a Proven Product under Alberta Transportation Product List, Slope Stabilization – Soil Nailing – Proprietary. The regional offices will be informed of the availability of this new technology.

TRIAL PROJECTS

Alberta sites: H771 – Pigeon Lake; H597:02 – Blackfalds; H575:04 – Nacmine; H564 – Drumheller; H619 – Vermillion; H11:04 – Abraham Lake; H36:02 – Chin Coulee
Also, various highway sites in Saskatchewan, installed by Saskatchewan Department of Highways and Transportation.

Fred Cheng

cc New Product Evaluation Standing Committee – Roger Skirrow