

GEOQUEST

Products



DRAINTUBE™

**IN ROADWORKS AND
CIVIL ENGINEERING
APPLICATIONS**

High-Performance and Environmentally Friendly Drainage

For years stone aggregates have been used to provide drainage for roadways. **DRAINTUBE™** offers an effective alternative to stone aggregates while at the same time offering many advantages:

Significant cost reductions,

Faster construction,

Less excavation and/or backfill,

Better performance,

Lower greenhouse gas emissions.

Effective drainage system helps in increasing the durability and performance of the road. **DRAINTUBE™** also helps in controlling the harmful effects of high water tables, saturated subgrades, heavy loads and freeze-thaw cycles.

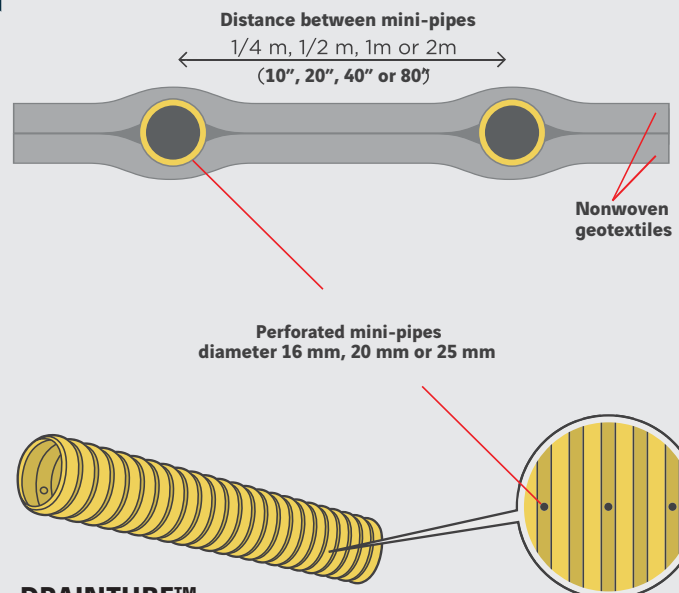


DRAINTUBE™ is a combination of proven materials like various geotextile layers (filtration, separation and protection layers) and perforated mini-pipes that are needle punched together for high capacity drainage. It is manufactured as per the standard to ensure optimum performance under the most difficult conditions. Each roll performs the functions of separation, filtration and drainage essential for building better roads.

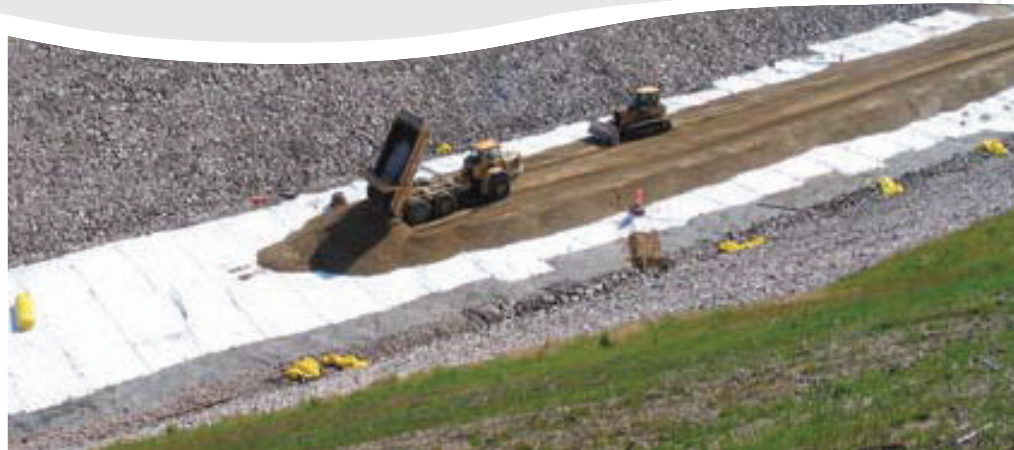
With its needle punched structure, **DRAINTUBE™** can be customized to meet project specific hydraulic, filtration and separation criteria. That's why we say that **DRAINTUBE™** is the bespoke drainage you want to. Our Lympha software helps the designer choose appropriate performance properties to solve whatever problems they might encounter.

DRAINTUBE™ offers economic, technical and environmental advantages over granular drainage solutions in many civil engineering applications.

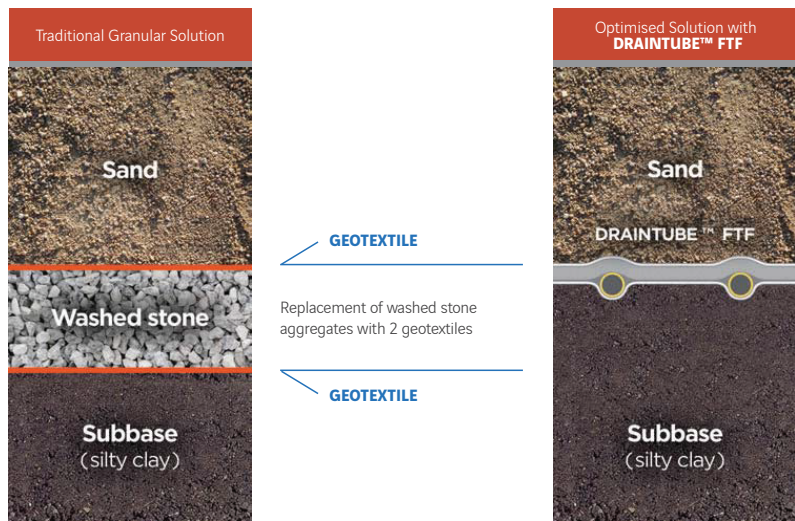
DRAINTUBE™ FTF



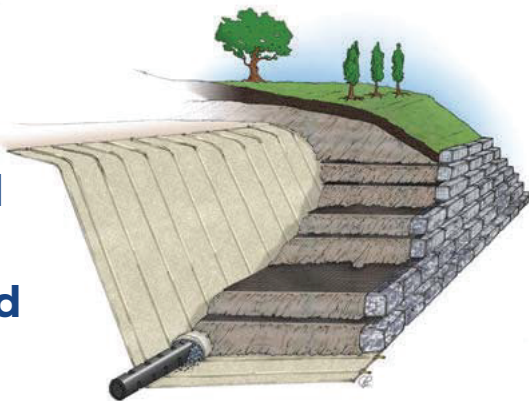
DRAINTUBE™
The Bespoke Drainage You Want!



For Roadwork Engineering



For Backfilled Slope or Reinforced Walls



DRAINTUBE™ Advantages:

DRAINTUBE™ helps to do away with the need for a layer of clean stone aggregates and two geotextile separators and it saves excavation time. **DRAINTUBE™** specifically sized for the project, provides the same hydraulic capacity as a layer of clean stone aggregates.

- **Cost savings :** The financial advantage of **DRAINTUBE™** over the clean washed stone aggregates is evident.
- **Logistics :** Cutting down on the travel time also means the job can be completed sooner.
- **Construction :** It is much easier to install **DRAINTUBE™** on a low foundation than a layer of clean gravel on a geotextile separator.
- **Helping the planet :** Replacing multiple truckloads of stones by few trucks of **DRAINTUBE™** consumes much less carbon, significantly lowering the effects of greenhouse gas.

Stone Transport Savings

Many advantages

Total distance saved	Fuel quantity saved	Number of travel saved	GHG emission saved (CO ₂ equivalent metric tons)
5,400 km (3,376 mi)	1,660 litres (438 gal)	180 round trips	4.58

(Figures based on a covered area of 10000 m² (107,640 ft²) using as an example of a washed stone aggregates deposit situated 15 km (9.3 mi) from the construction site.)

DRAINTUBE™ OFFERS:

3 perforated pipes size options: 16, 20 and 25 mm

4 perforated pipe spacing options: 2 m, 1 m, 1/2 m, 1/4 m (80", 40", 20", 10")

Multiple geotextile options

Available transmissivity between 2.5×10^{-4} to $4 \times 10^{-3} \text{ m}^2/\text{s}$ at $i=0.1$

No change in transmissivity up to 2500 kPa (50,000 psf)

Low creep reduction factor

No geotextile intrusion

Standard roll size: 3.98 m x 75 m (13.1'x246')

Faster and easier to install than other types of geocomposites, no tying required!

Consistent QA/QC

Cost Optimisation



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